



Impress/Trade Mark logo type.1996 CAPCOM CO.,LTD.JAPAN.

Instruction Manual

(Translation by Petkorazzi)

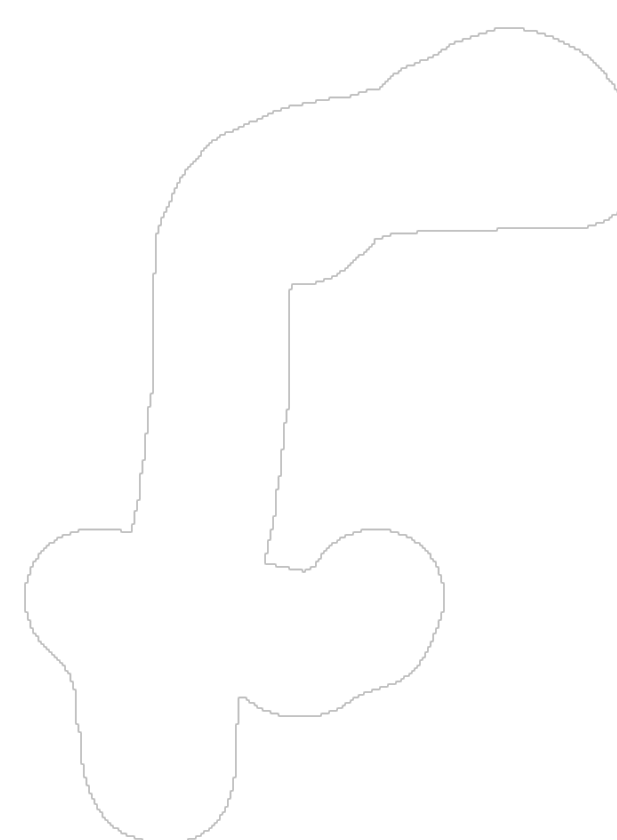


Table of Contents

Before Use	P 1	7. Parts Adjustment	P 16
1. Specifications	P 7	8. Rotating the Monitor	P 23
2. Accessories	P 8	9. Maintenance of Each Part	P 25
3. Part Names	P 8	10. Powering On/Off	P 28
4. Handling Precautions	P 10	11. Troubleshooting	P 28
5. Installation/Assembly	P 11	12. Wiring Diagram	P 30
6. Operating Service Panel	P 15		



Before Use

<About Symbols>

Please use this instruction manual and the labels on the product safely and effectively.

To prevent harm to you or others or damage to your property there are various symbols.

Please read and understand these contents well.



WARNING

Ignoring the contents of this warning and handling contents improperly can lead to death or serious injury.



CAUTION

Ignoring the contents of this warning and handling contents improperly can lead to personal harm or property damage.

Symbols



The triangle symbol indicates a warning (in this example, a warning of the risk of electrical shock).



The "NO" symbol indicates a prohibited act (in this example, that disassembly is prohibited).



The dark circle symbol provides an instruction on what force to impart (in this example, to remove the plug).

Precautions



WARNING

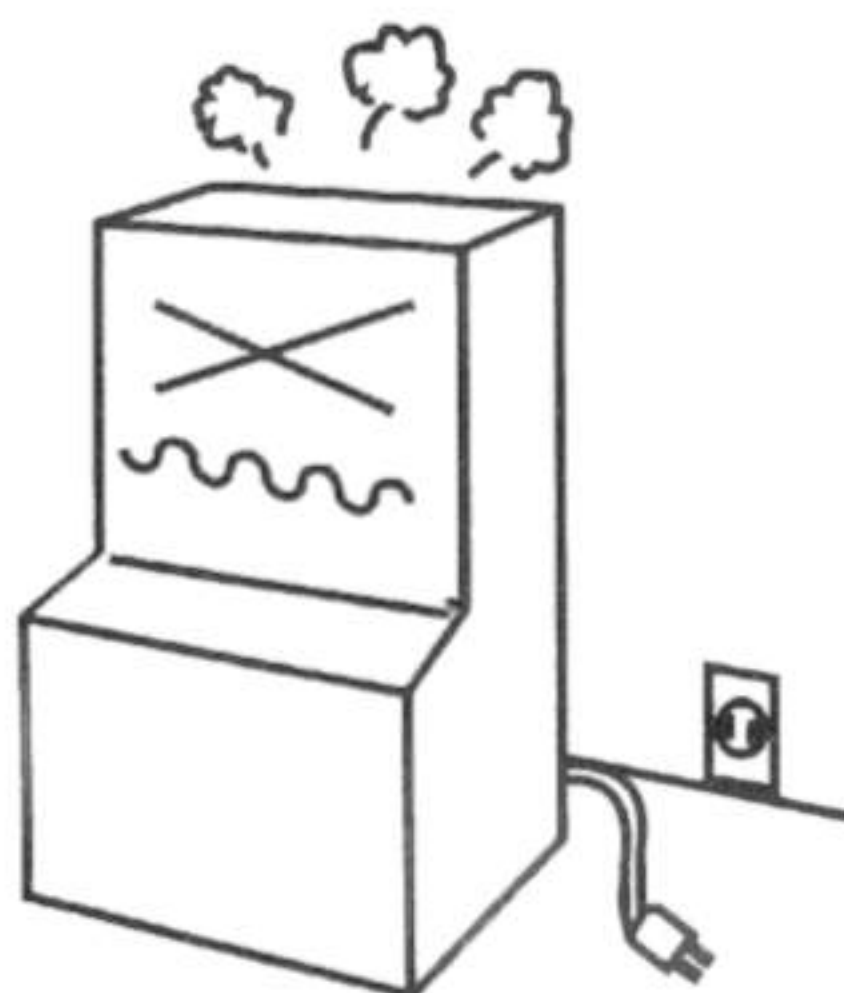
When an abnormality occurs

- In the unlikely event that there is smoke or a strange smell, use may cause fire or electric shock. Turn off the power switch immediately, then be sure to unplug the plug from the outlet and confirm that there is no smoke. Seek professional help with repair as repair by the customer is dangerous.



Remove plug from outlet

- If there is no display or sound (or unusual sounds are present) do not use as use may cause fire or electric shock. Immediately turn off the power switch and unplug the plug. Request service from a repair center.



- If water enters the machine, immediately turn off the power switch and unplug the plug. Then contact a service center. If machine is used, it may cause fire or electric shock.



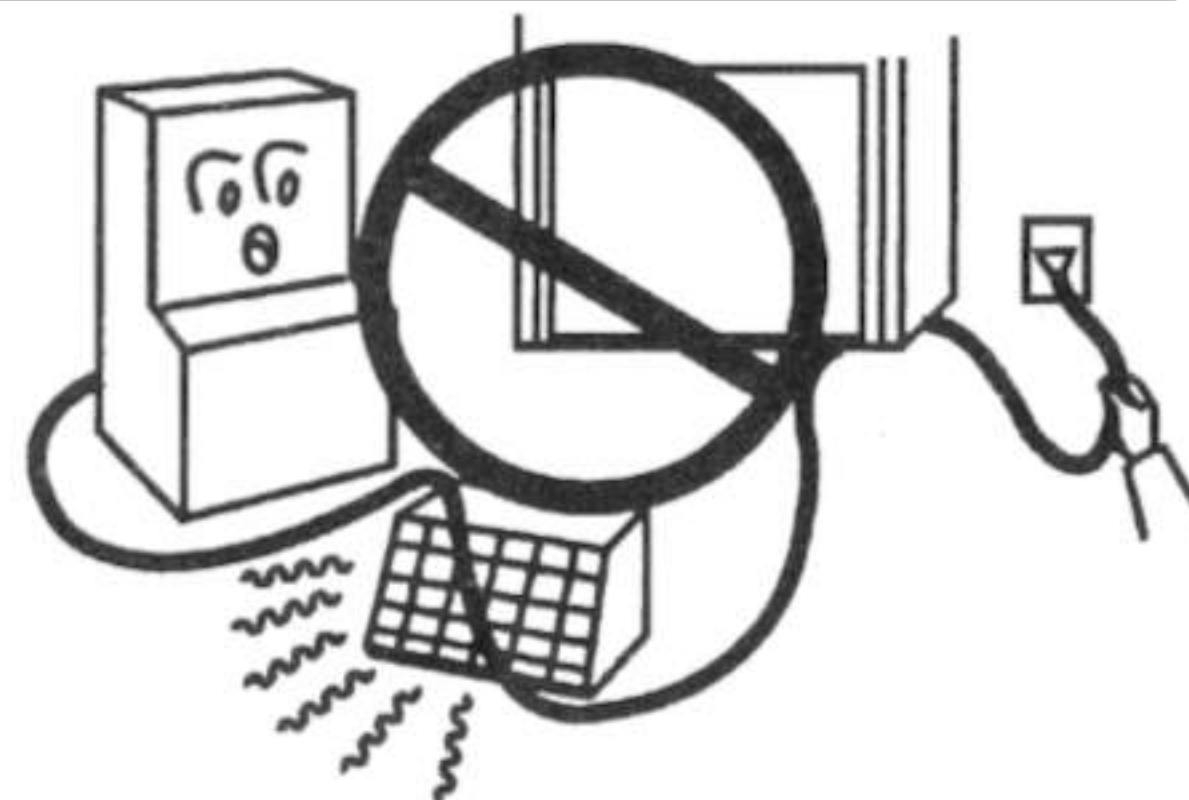
Remove plug from outlet

Power Cord Care

- The power cord can become damaged with improper use, such as forcibly bending the cord, placing heavy objects upon it, heating it, or pulling it. Damage to the power cord can cause fire or electric shock.

Do not:

- Pull the cord
- Place heavy objects on cord
- Use a damaged cord
- Place cord near heat appliance
- Leave extra cord bundled



- Make sure the power cord does not become stuck underneath the unit. This can damage the cord and cause fire or electric shock. Do not cover the cord with a rug as you may unintentionally place a heavy object on the cord.



- If the power cord is damaged (core exposed) please request a replacement as there is risk of fire or electric shock.

- Make sure the power plug is not dirty and there is no rattling. Make sure to insert the plug all the way to the base. If the plug is dirty or the connection is incomplete, it may cause electric shock or fire.

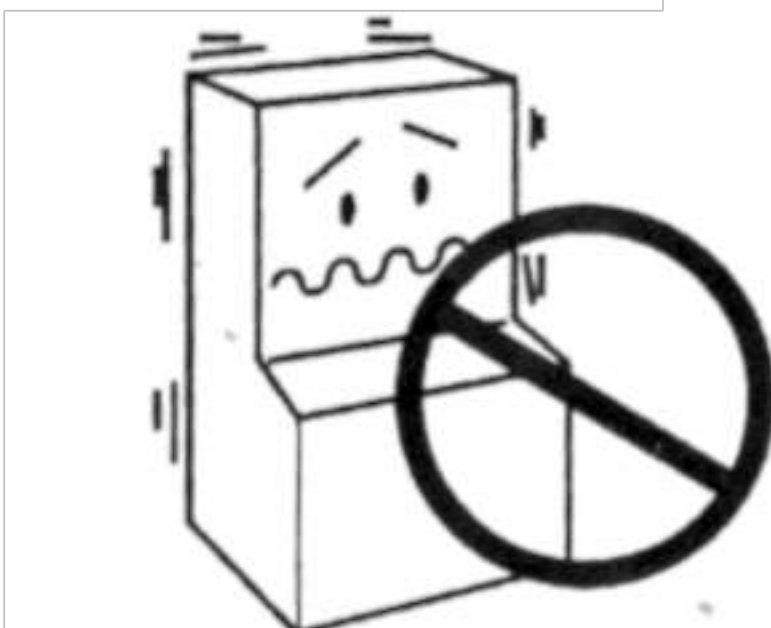




WARNING

■ Do not put in an unstable place

Do not place unit in an unstable location where wobbling or tilting occurs as it may fall over and cause injury.



■ Use only with displayed power supply

Using a power supply other than the displayed voltage may cause fire or electric shock.



■ Do not place liquid containers on top

Do not put liquid containers (such as cups, vases/flowerpots, chemicals, or cosmetics) on top of this machine as spills may cause fire or electric shock.



■ Foreign object hazards

- Dropped or accidentally inserted foreign objects may enter through ventilation holes and cause a risk of fire or electric shock.



- If a foreign object gets inside the machine, turn off the power switch and unplug the power cord. Contact a service center as using the machine may cause fire or electric shock. Check machine regularly for foreign objects or defects.



Unplug the plug

■ Please do not modify

Do not modify this machine. It may cause fire or electric shock.



Disassembly prohibited



Beware electric shock

■ Please ground before using

Be sure to connect the safety ground terminal of this machine to the ground wire.



CAUTION

■ Do not place in a humid or dusty environment

- Places with a lot of humidity or dust may cause fire or electric shock.
- Examples include dance areas, doorways, near air conditioners, places where water hits, and other harsh places. These may cause fire or electric shock.



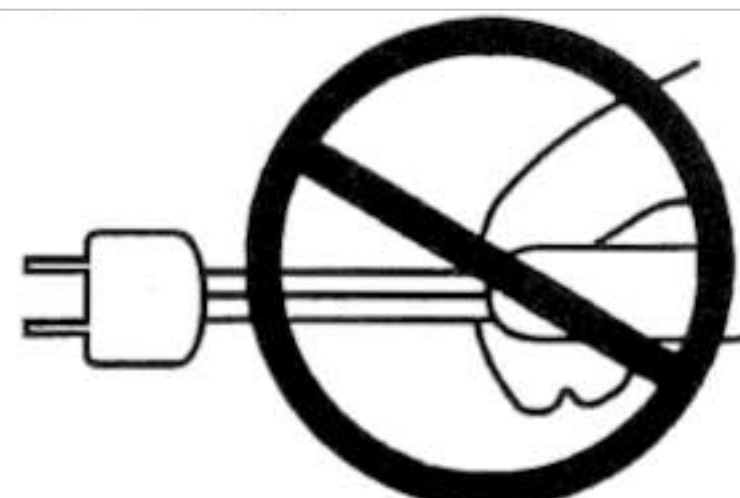
■ Set the brakes on the casters

Set the brakes on the casters (if installed). Failure to do so may cause the machine to move or fall and be a source of injury.



■ Do not handle the power cord roughly

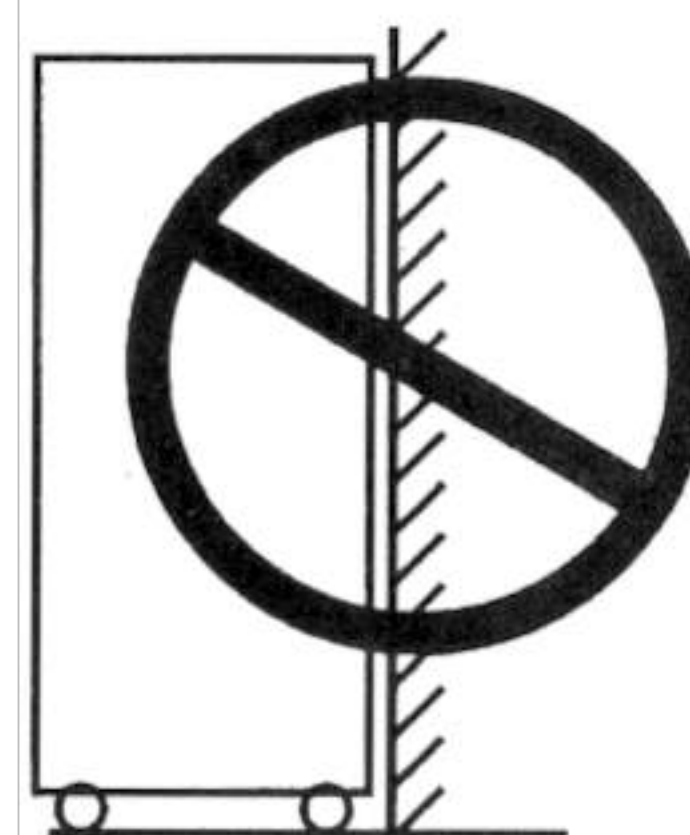
- Keep the power cord away from heating appliances. The coating may melt, causing fire or shock.
- Do not insert or remove plug with wet hands. This may cause electric shock.
- Do not unplug by pulling on the power cord as this may damage the cord and risk fire or electric shock. Be sure to hold the plug when unplugging the machine.



■ This unit is for indoor use only. Please do not use outdoors.

■ Do not block ventilation holes

Do not block the ventilation holes of this machine as heat may build up inside the machine and cause a fire. Do not place machine upside-down or on its back or sides. Do not place machine in a narrow and/or poorly-ventilated area. Do not place machine on top of or cover machine with flammable materials. When installing, make sure machine and wall are separated by at least 10 centimeters.



■ Do not hang on, ride, or place heavy objects on machine.

- Neither operators or customers (players) should hang from or get on the machine. Failure to be careful may cause the machine to fall or break and cause injury.
- Do not place heavy objects on the machine. Either the object or the machine itself may fall and cause injury.

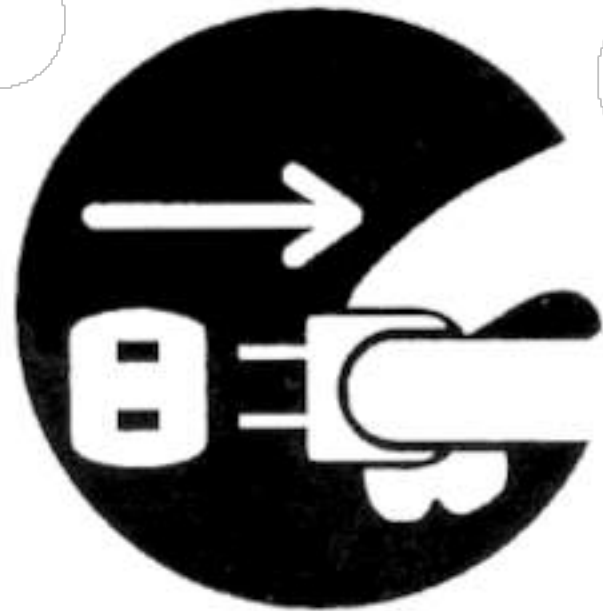




CAUTION

■ When not used for a long time

If you do not use this unit for a long time (such as when traveling), be sure to unplug the unit for safety.



■ When cleaning

For safety when cleaning, turn off the power switch and unplug the plug from the outlet.



■ Cleaning the inside once a year

About once a year, contact a service center to remove dust inside the machine. If you do not clean it for a long time it will catch fire or break down, especially in areas with high humidity. It is more effective if done before the rainy season.



General Notes

■ Do not place machine in a location where it could get warm/hot

Please note that placing the machine in direct sunlight or near heating appliances will adversely affect the cabinet and parts.



■ Do not place near the air conditioner

It may cause condensation or dust.

■ Do not use this machine overseas

This machine is manufactured for use in Japan. It cannot be used in other countries because the power supply specifications are different. In addition, safety laws and regulations (radio wave regulations, material charge regulations, etc.) vary from country to country. If this machine and/or related consumables are sent to other countries in violation of these regulations, you may be subject to penalties.



Precautions for customers

<For Customers>

We ask that general customers (players) also be alerted on a daily basis. Please note the following points:

- ① Do not place any drinks on this machine. If it spills inside the machine, it may cause a malfunction.
- ② Do not lean against this machine. It may fall and cause injury.
- ③ Do not shake this machine. It may fall and cause injury.
- ④ Do not pull out the plug unnecessarily. It may cause electric shock.
- ⑤ Do not place foreign objects into the coin selector. It will cause failure.

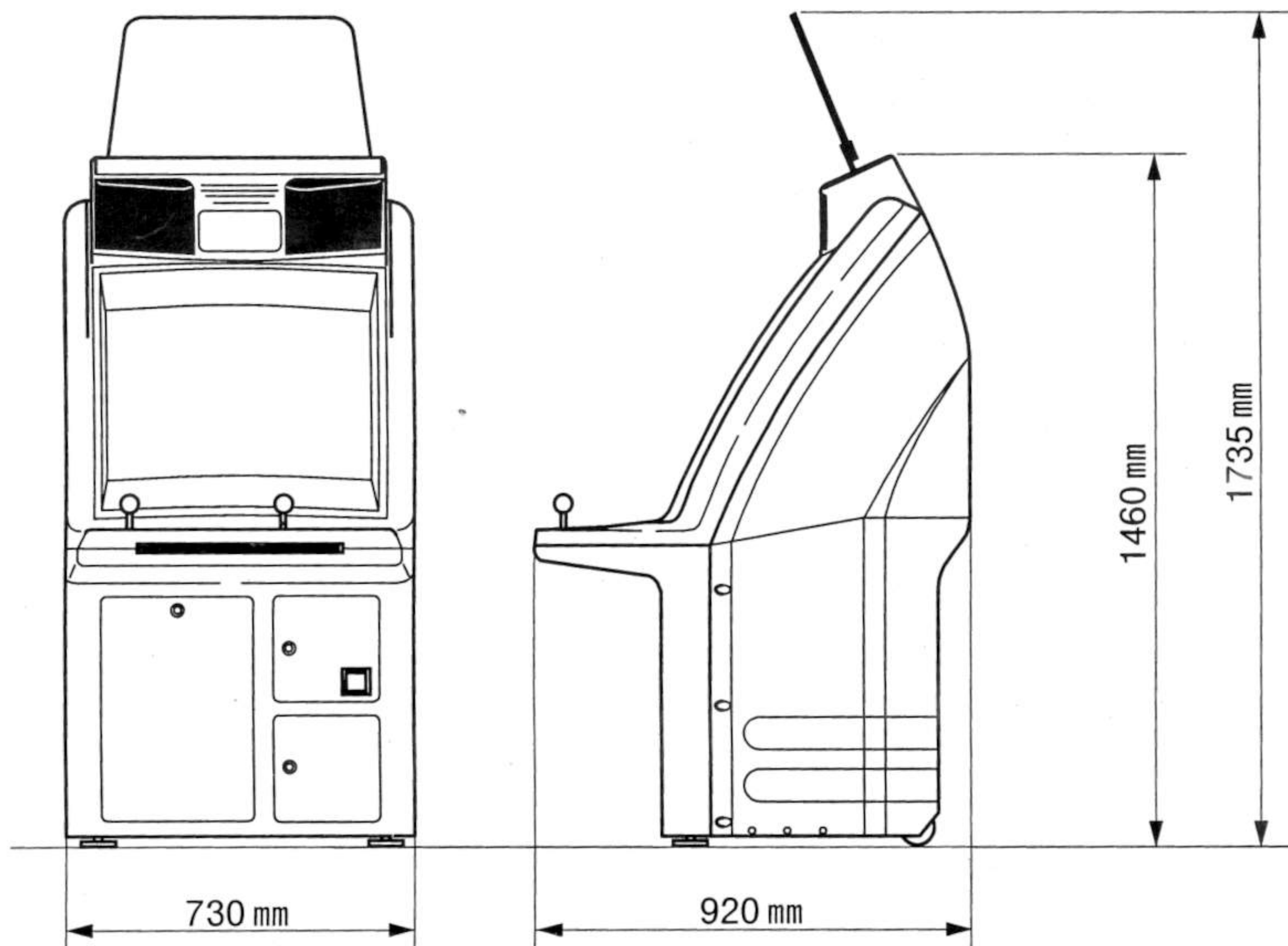
1

SPECS

Body

- Name Impress 29
- Dimensions Width 730mm x Depth 920mm x Height 1460mm
Maximum height 1735mm (when marquee panel is attached)
- Weight About 110kg
- Rated Voltage 100V AC
- Rated Freq. 50/60 Hz
- Power Draw 150W
- Coin Capacity Approx. 5000 coins (100-yen coins)

The specifications described in this manual are subject to change without notice. Please be forewarned.



2

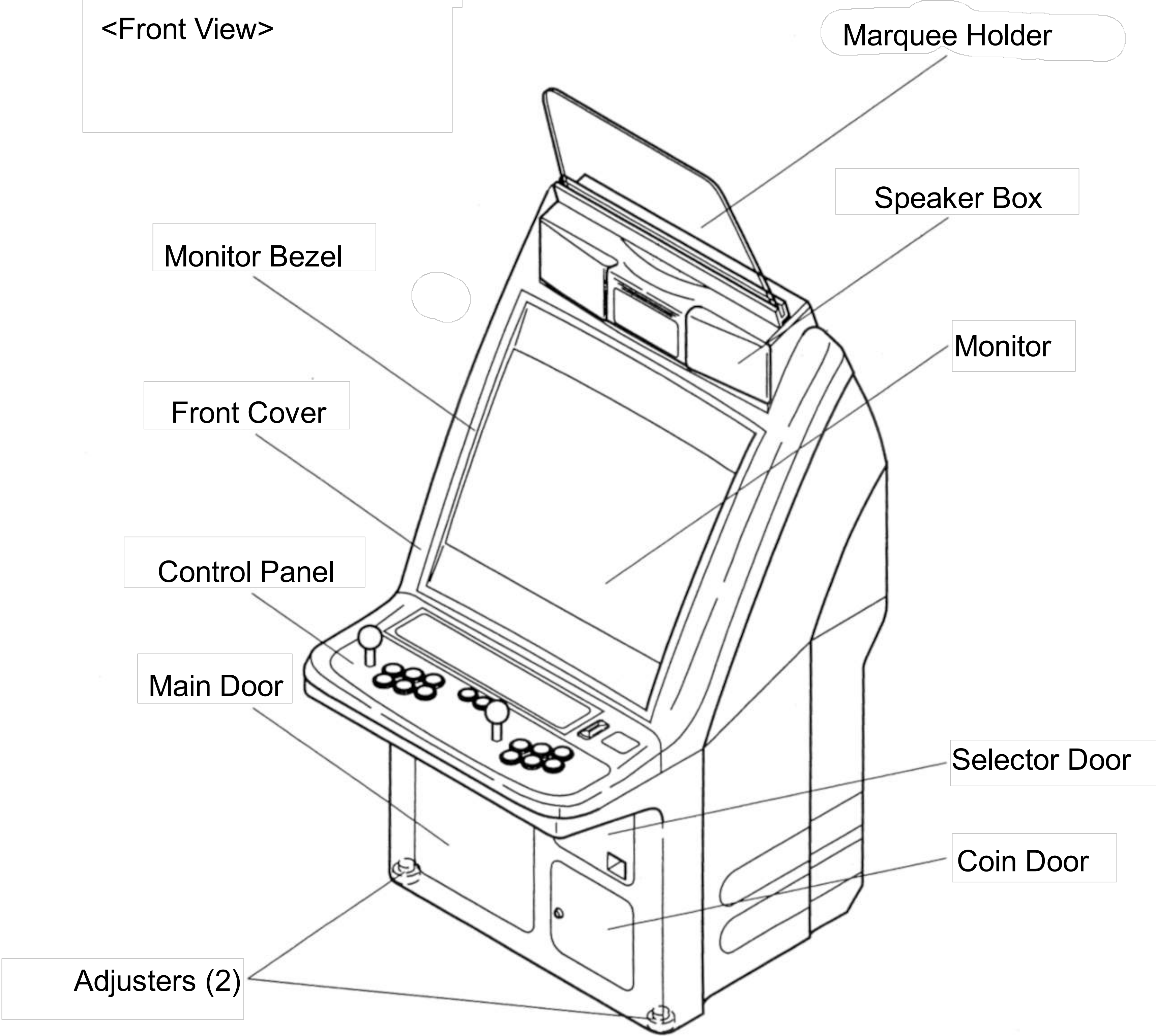
Accessories

●	Instruction Manual	.....	1
●	Torx Wrench (M4)	.....	1
●	Keys for Doors and Control Panel	.....	4
	Coin Door Key	.....	2
●	Marquee Holder	.....	1 (2 sheets)
●	Mounting Screws		
	Torx Screw (M4 x 12)	.....	8
	Tap Tight Screws (M4 x 10)	.....	4
	Flange Nut (M4)	.....	2
●	Power Cord	.....	1
●	Cord Clamp <small>ケーブルクリップ</small>	.....	2

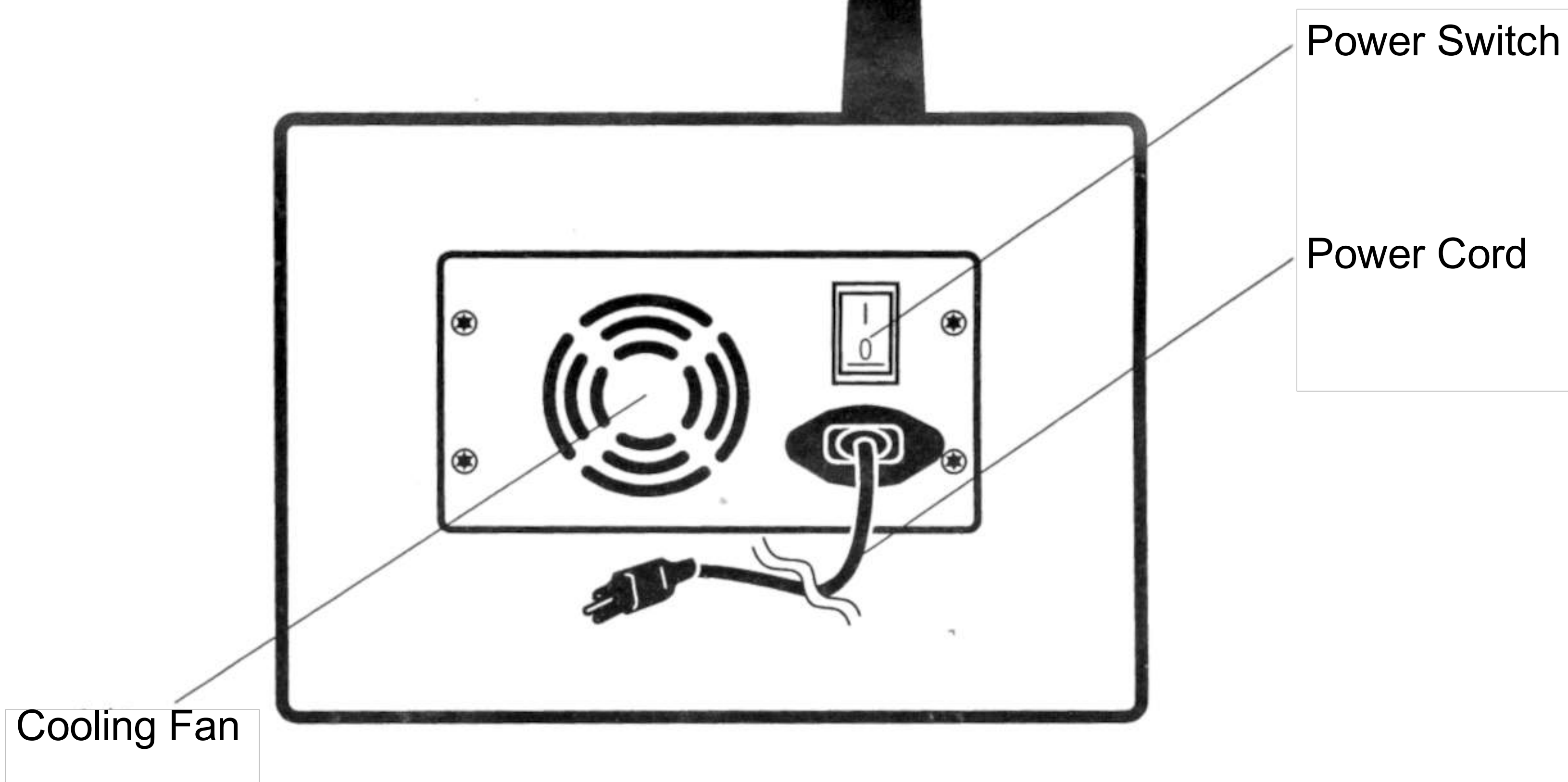
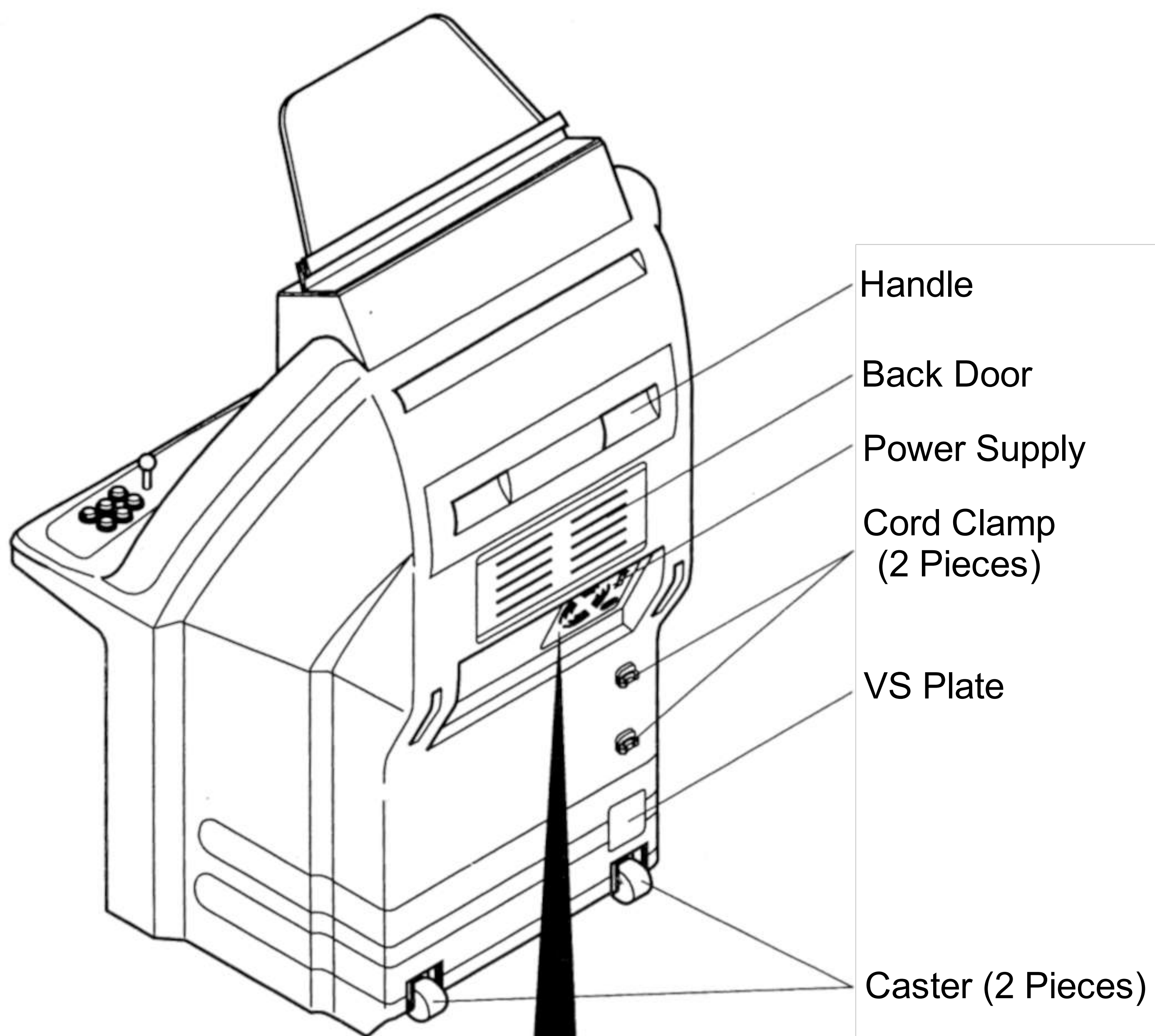
3

Part Names

<Front View>



<Rear View>



4

Handling Precautions

4 — 1 Transportation Precautions

- This machine uses a cathode ray tube, it is large when transporting and moving. Please do not shock.
- When moving, hold using the handle on the back and the speaker box.
- Avoid contact with water such as rain.

4 — 2 Installation Precautions

- This machine is for indoor use. Please do not use it outdoors. Also, even when using indoors, do not install it in the following locations:
 - Places where there is a risk of condensation due to leaks/humidity
 - Places exposed to direct sunlight
 - Places that are directly exposed to hot air, such as locations near heating equipment
 - Places with strong vibrations or steep slopes
 - Places that interfere with firefighting equipment or emergency exits
 - Places with a lot of dust and dirt
 - Near dangerous goods
- Also pay attention to the following points:
 - Do not put anything near the vents, especially the vents for the power supply
 - Make sure the power cord is not obstructing passageways
 - Use only 100V AC as the power supply

4 — 3 Cleaning

- If the machine gets dirty, wipe gently with a soft cloth.
- Never use organic solvents such as thinner as this may damage the machine.

4 — 4 Working Precautions

- Be sure to turn off the power and set the adjusters firmly before working. Also, never work with wet hands.
- Insert or remove plug with the power source turned off.
- Use the specified fuse
- When connecting/disconnecting the board or other connectors, ensure connectors are fully seated or removed to prevent malfunctions.
- If the machine is surrounded by metal plates or near sources of magnetism, color shift will occur. In this event, perform a demagnetization of the surrounding area.

In addition, we do not take any responsibility if this machine is modified.

5

Installation Method



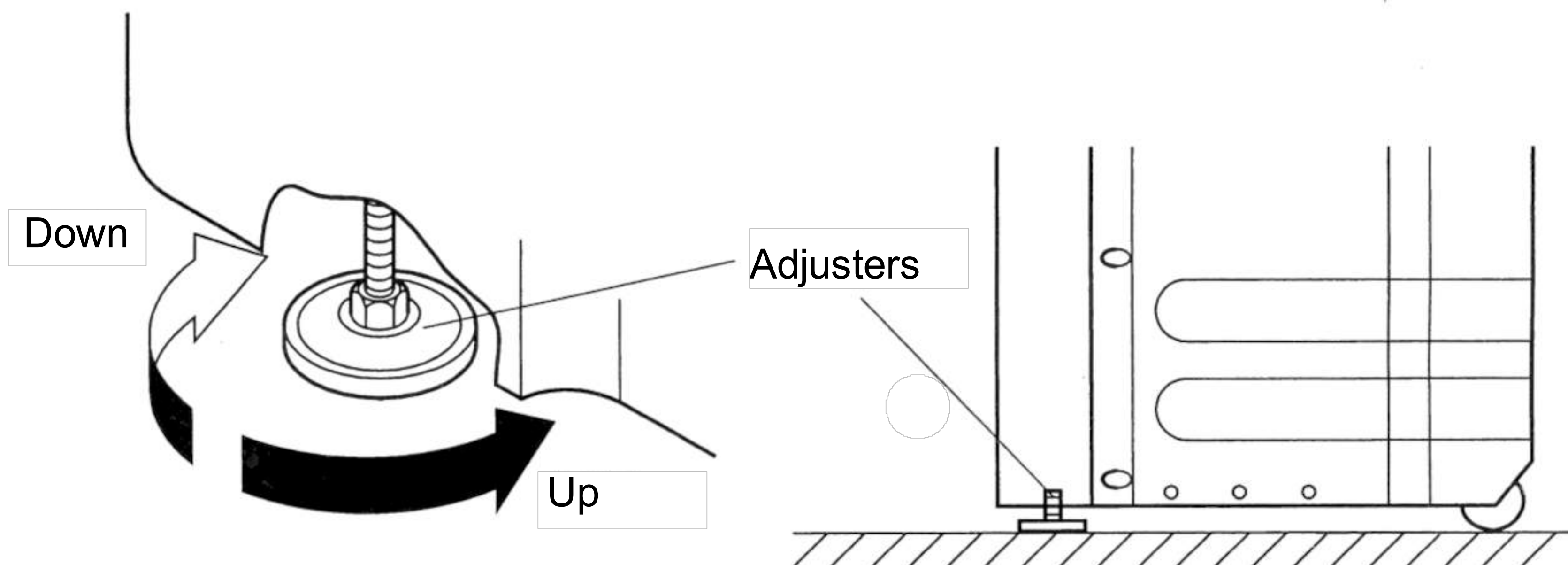
WARNING

Work with multiple personnel to prevent the risk of accident or injury.

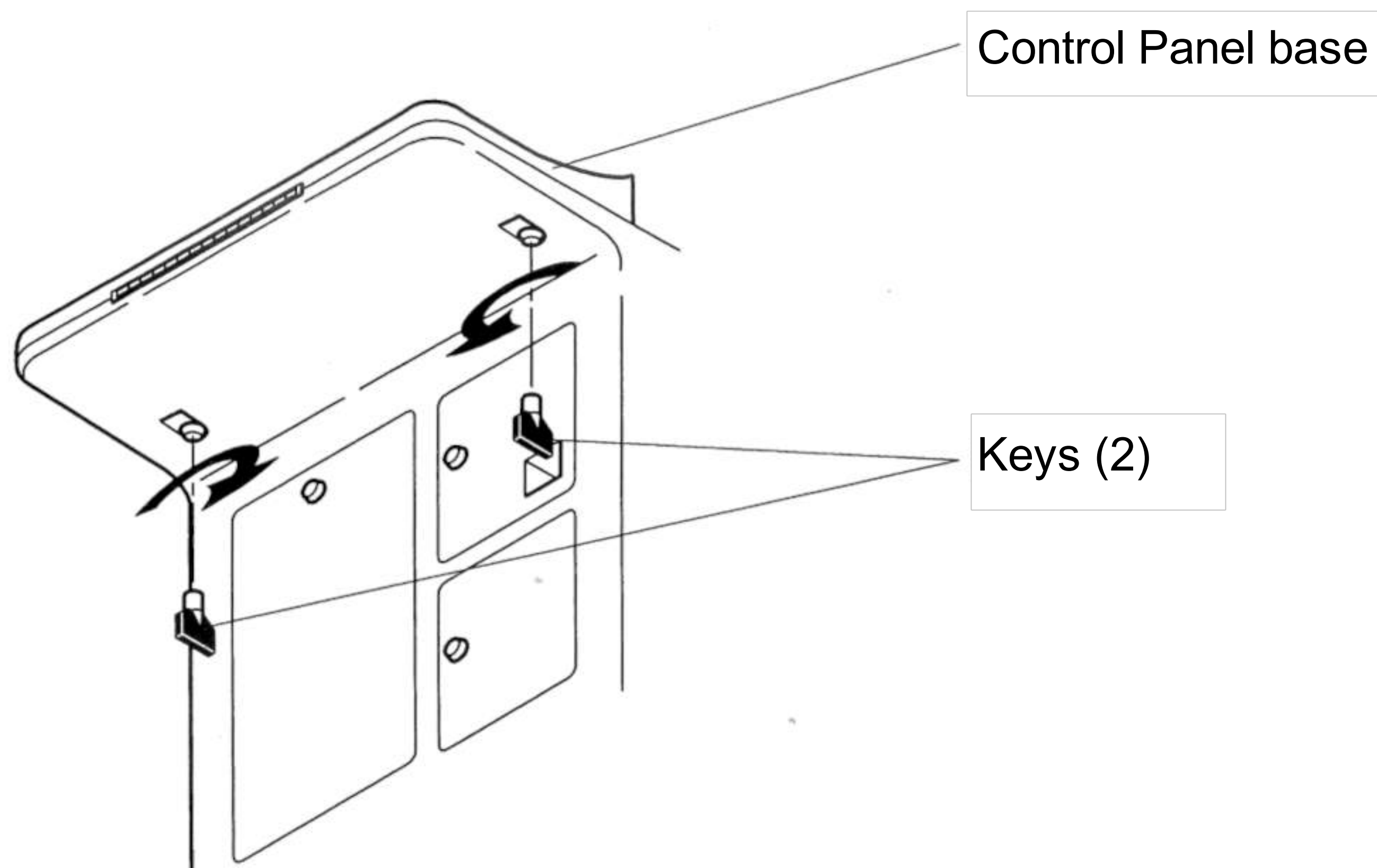
Do not turn on the power until the assembly is completed.

5 — 1 Main Body Assembly

- 1 . Adjust the adjusters at the bottom until the machine sits level and does not move.



- 2 . Unlock the two Control Panel locks using two keys to open the control panel base.

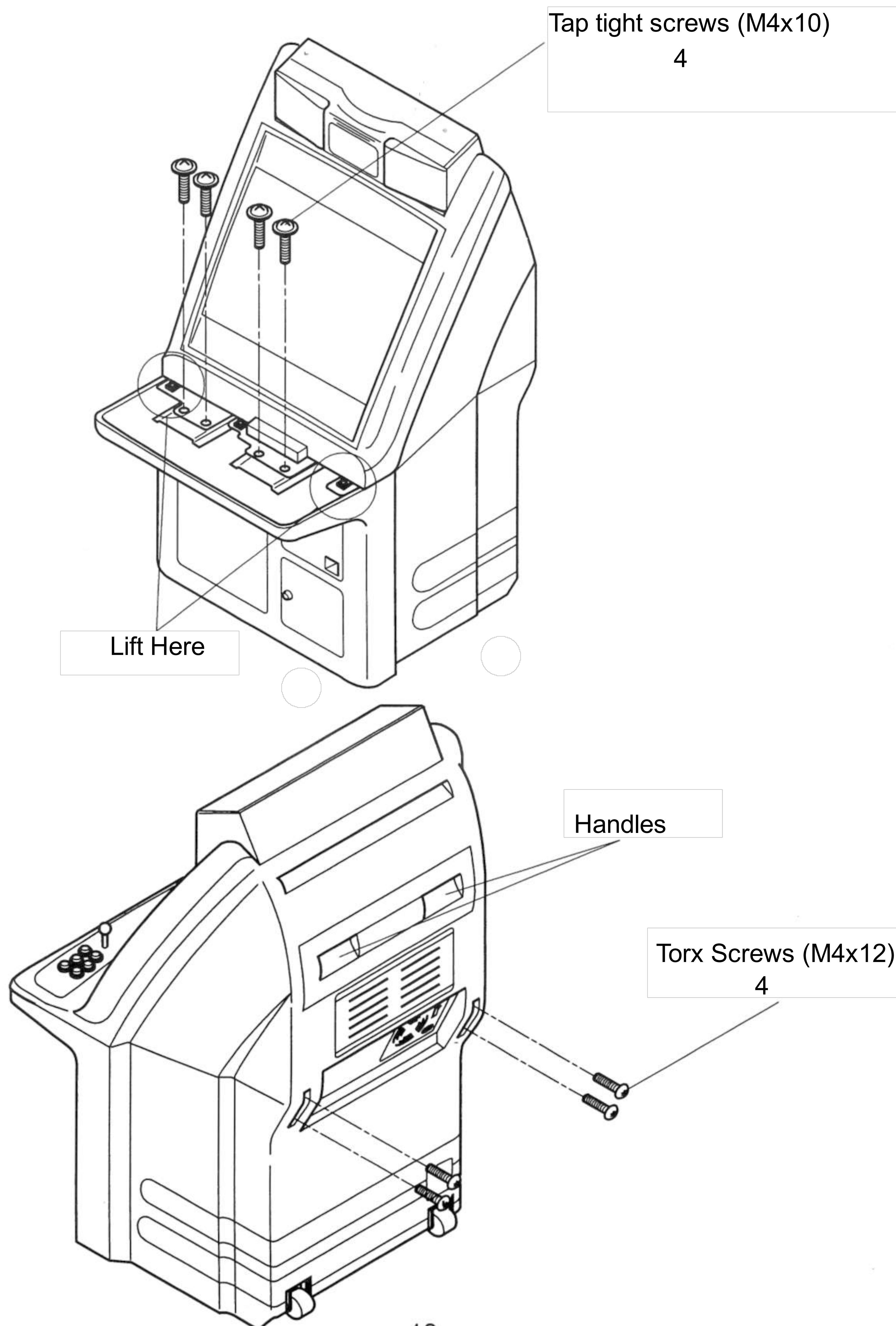


3. Place the upper part of the body on the lower part of the body and attach with 4 tap tight screws (M4x10) and 4 Torx screws (M4x12).



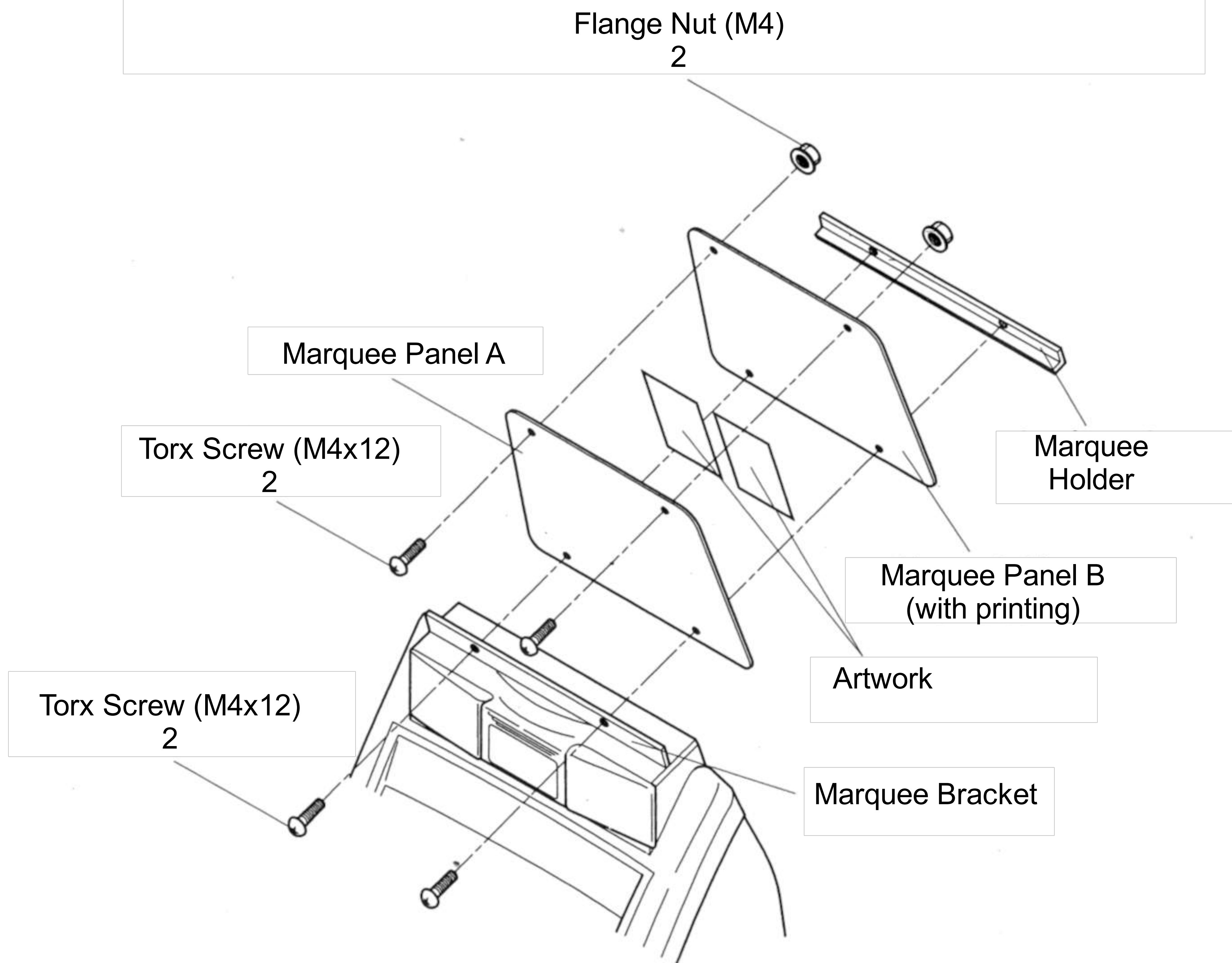
CAUTION

When lifting the upper part of the body, be sure to use the handles and the circled portions in the figure below.
This work may pinch your hands so be sure to perform this work with two or more adults.



5 — 2 Marquee Installation

Marquee artwork is sandwiched between marquee panels A and B and attached using 4 Torx screws (M4x12) and two flange nuts (M4)

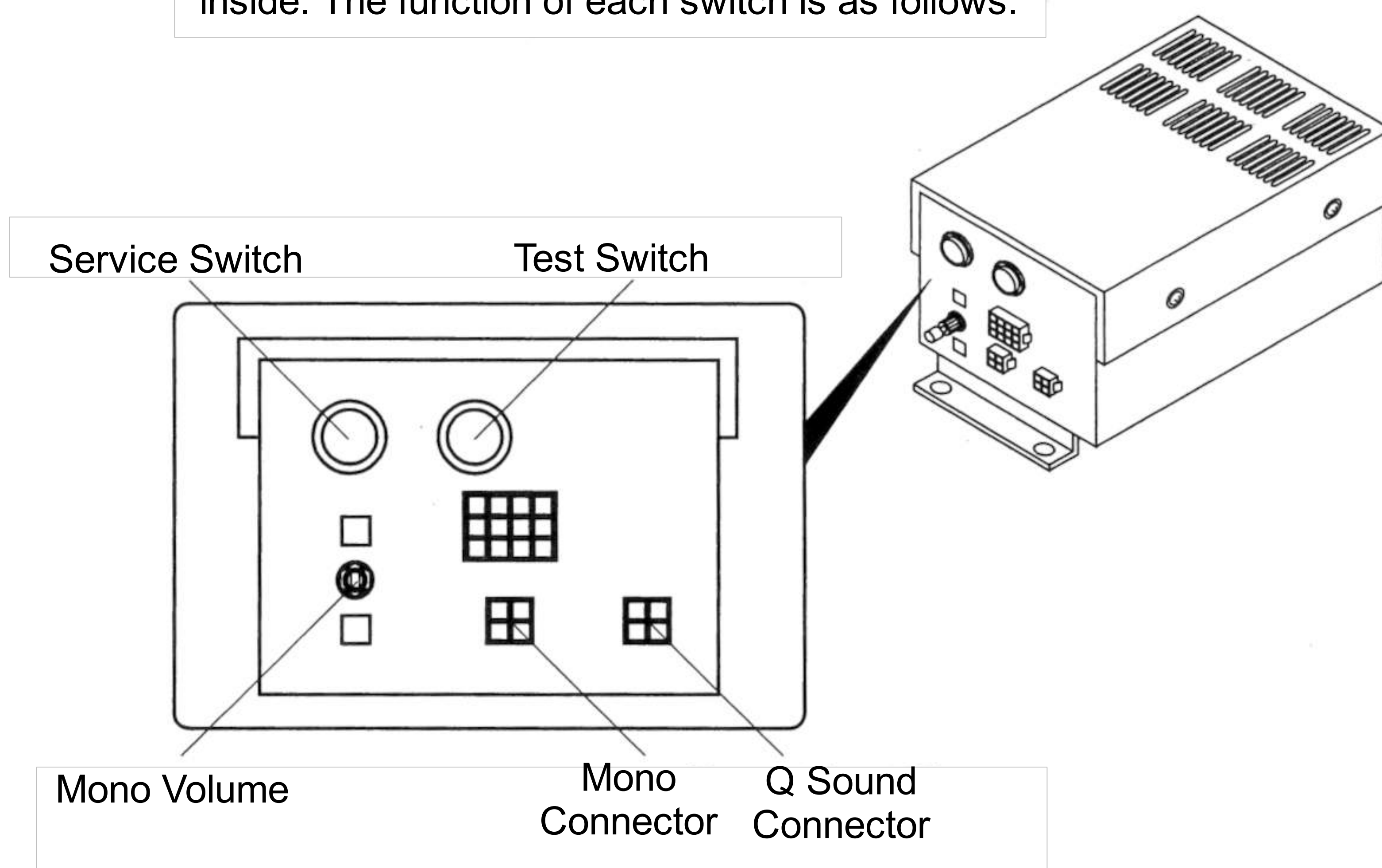


5 — 3 Dual machine ("VS") installation

Remove the VS panel on the back of the machine and run the battle harness (sold separately) through.

Operating the Service Panel

When you open the main door, you will find a service panel inside. The function of each switch is as follows:



① Mono Volume

When using a board that does not use Q Sound, use this control to adjust the volume. When using a Q Sound compatible board, use the VOL switch on the board to adjust the volume.

② Mono Connector

When using a board that does not use Q Sound, use this connector for mono audio.

③ Q Sound Connector

When using a board that supports Q Sound, use this connector for Q Sound audio.

④ Service Switch

Gives one credit. This does not cause the counter to go up.

⑤ Test Switch

This is used when testing the game board.

When shipped from the factory, the Q Sound connector is used.

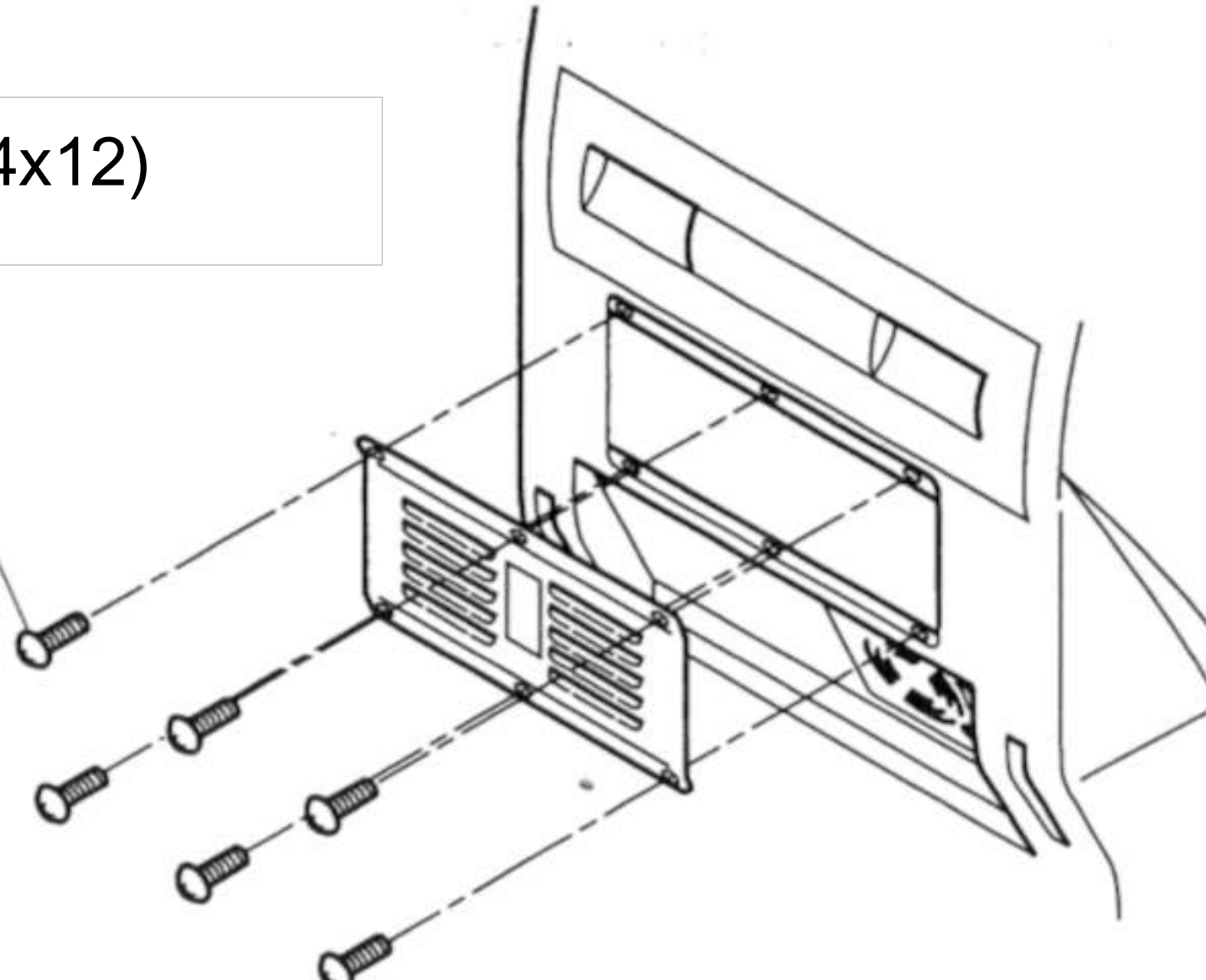
**CAUTION**

It is necessary to remove each part before making adjustments. This is explained below.

7 — 1 Opening the Back Door

1. Remove the 6 Torx screws (M4x12) that hold the back door in place

Torx screw (M4x12)
6

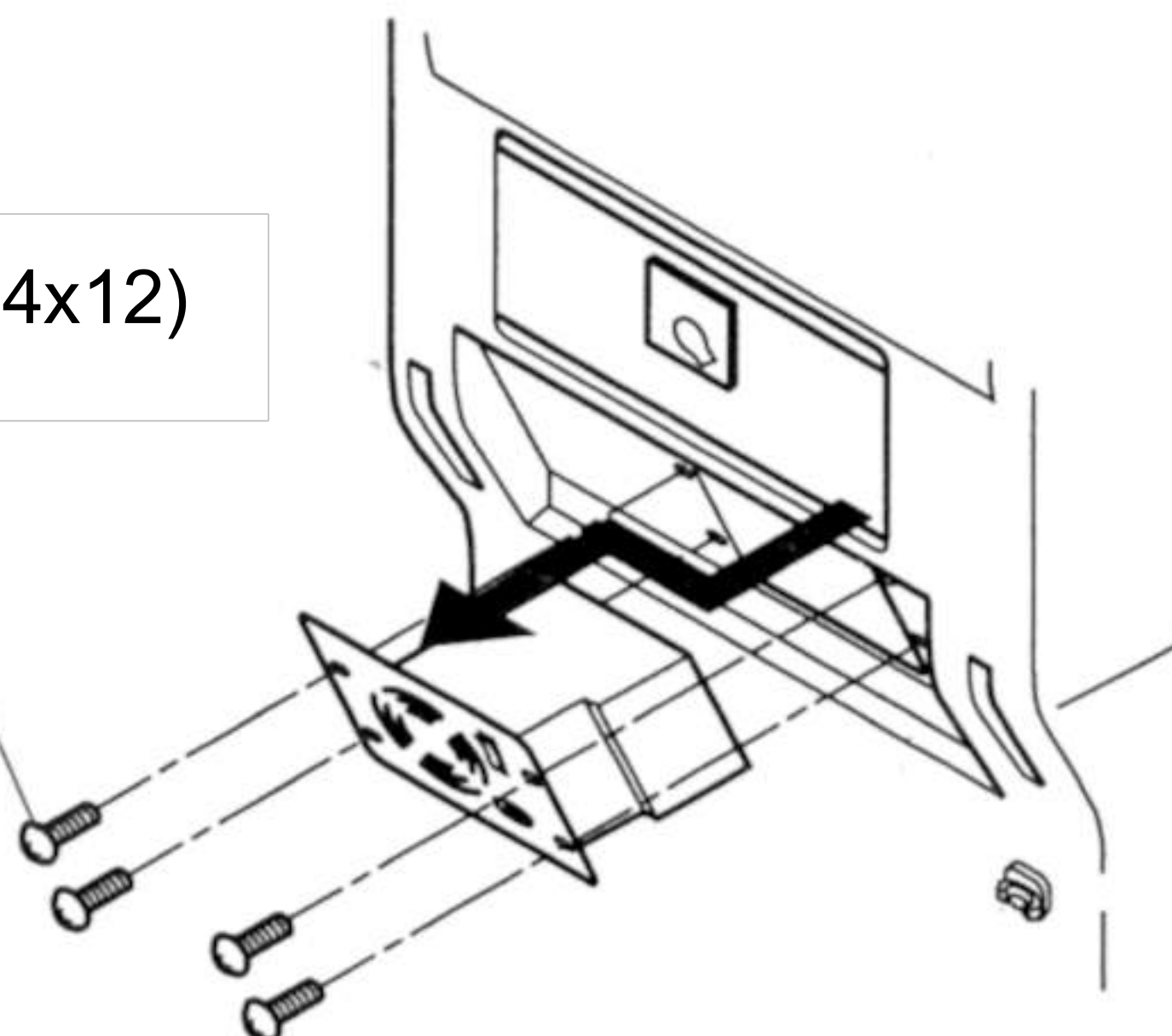


2. Installation is the reverse of removal.

7 — 2 Removing the Power Supply

1. Disconnect the two power cords connected to the power supply (The external power cord and the internal monitor power connection).
2. Remove the four Torx screws (M4x12) that secure the power supply to the machine.
3. Pull the power supply towards you slightly, then move it to the left (being careful not to hit the monitor neck) and pull to remove.
4. Installation is the reverse of removal.

Torx Screw (M4x12)
4





WARNING

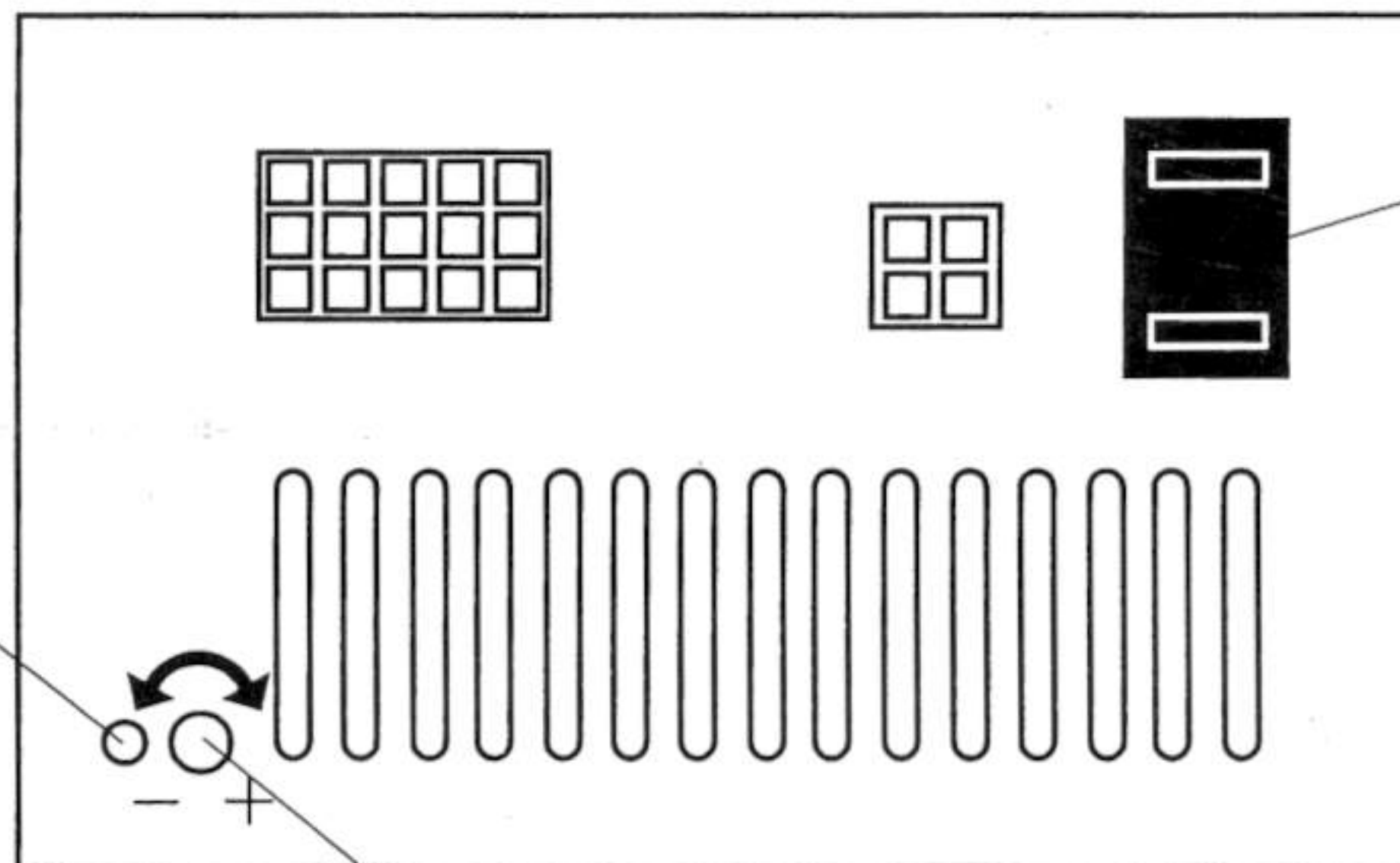
Some items need to be performed while the power is on. These should only be done by a service person.

7 — 3

Power Supply

<5V Adjustment>

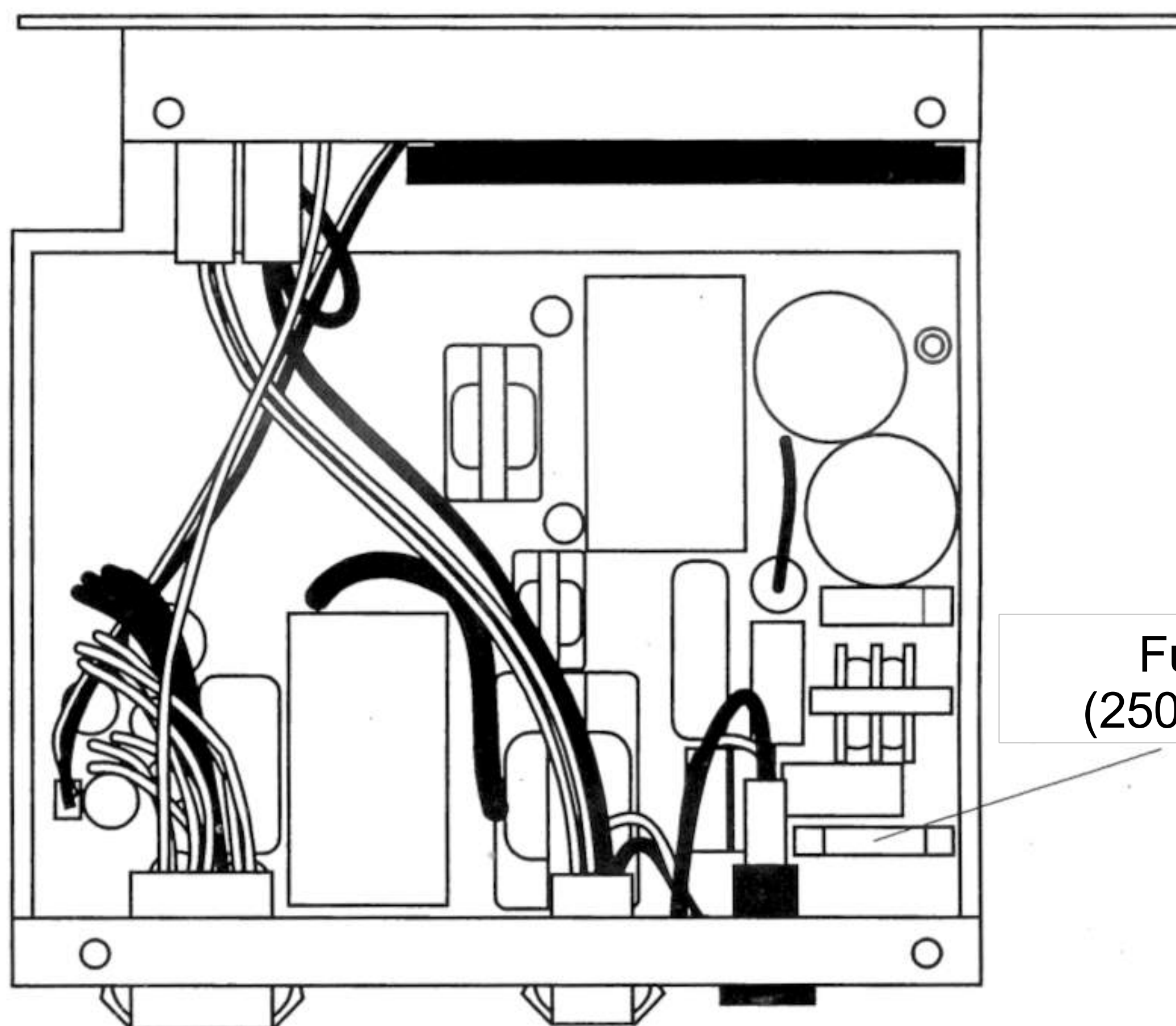
Power LED



AC Outlet
For Monitors

5V adjustment control for
switching regulator

The 5V adjustment is pre-set at the time of shipment from the factory; it should not be necessary to adjust. Adjustment may destroy game boards.



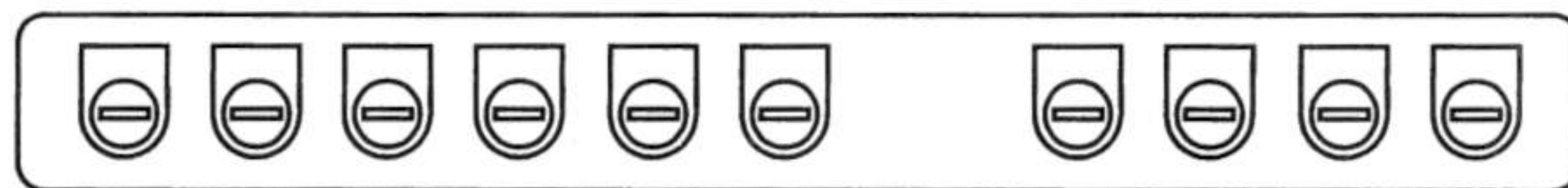
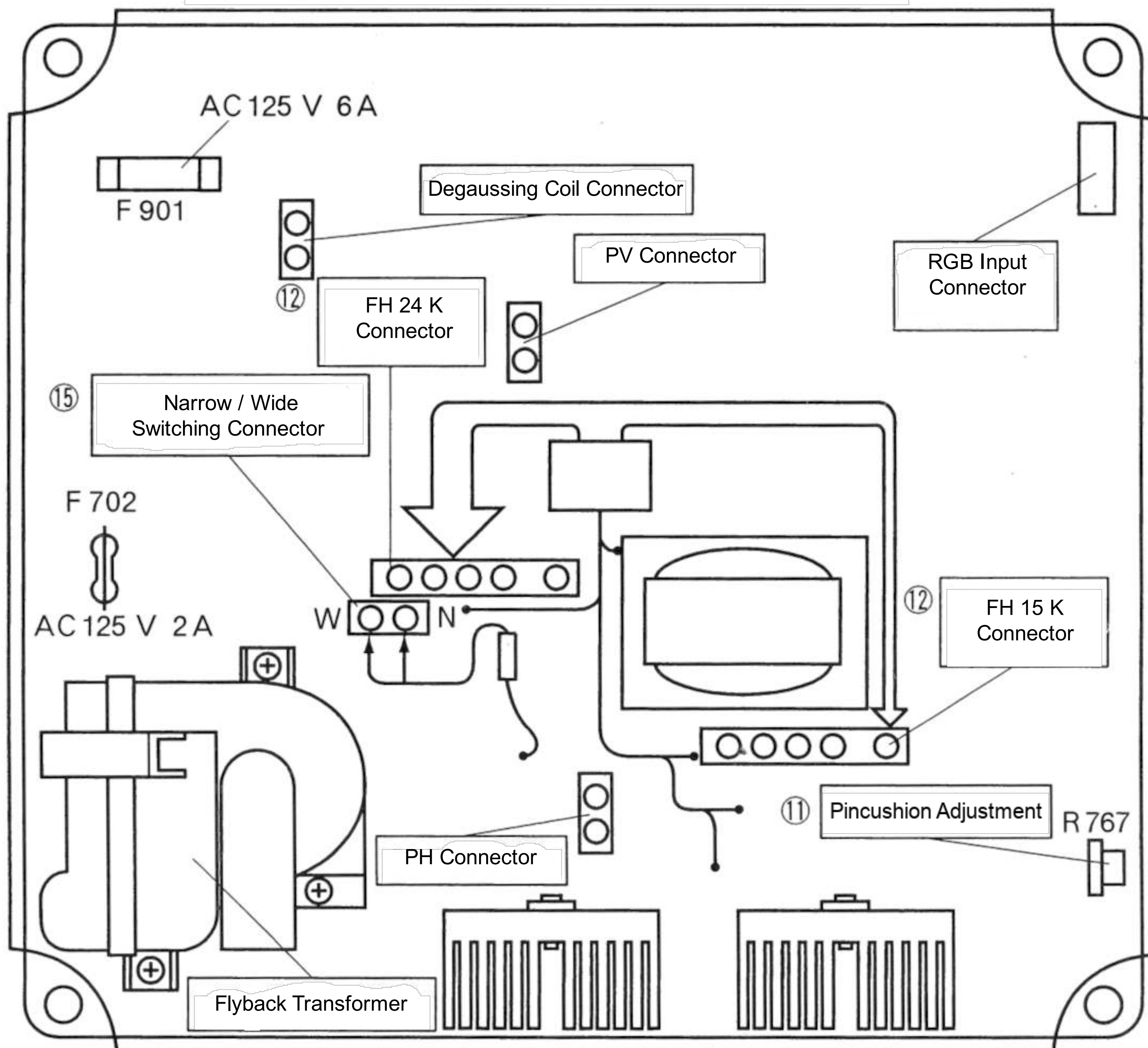
Fuse
(250V 3A)

If the fuse blows the circuit may be defective. Contact our service center for a replacement.

7 — 4 Adjustment Functions

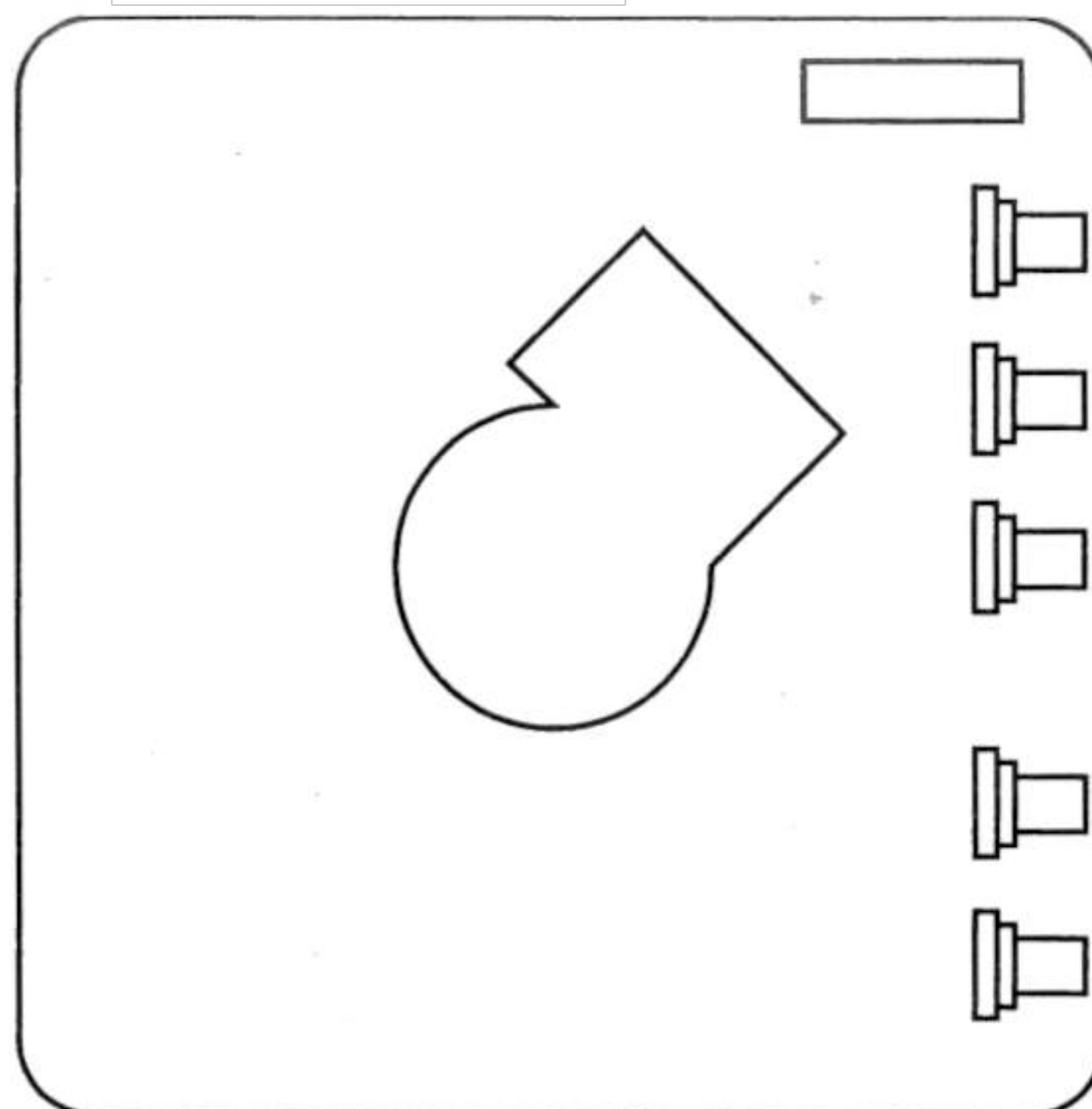
1. Board Adjustment Points

<Main Board / Front Control Board>



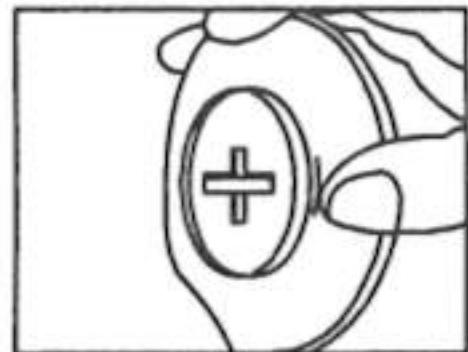
- | | | | | |
|----------|----------|----------|----------|----------|
| ① H.SIZE | ③ H.HOLD | ⑤ V.SIZE | ⑦ BRIGHT | ⑨ G.GAIN |
| ② H.POSI | ④ V.POSI | ⑥ V.HOLD | ⑩ B.GAIN | ⑧ R.GAIN |

<CRT Board>



- ⑮ B.BKG
- ⑮ G.BKG
- ⑮ R.BKG
- ⑮ B.DRIVE
- ⑮ R.DRIVE

2. Connection Instructions

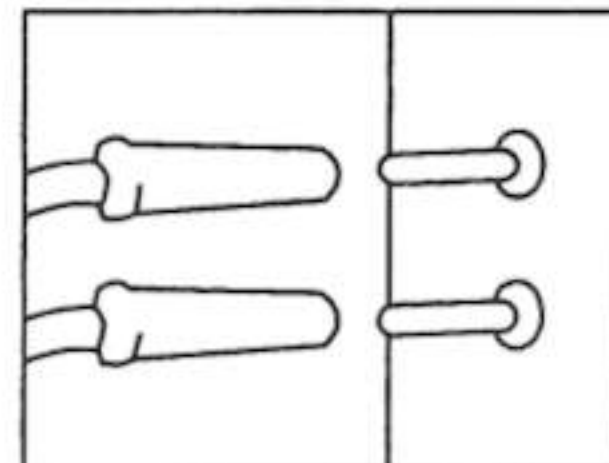


WARNING

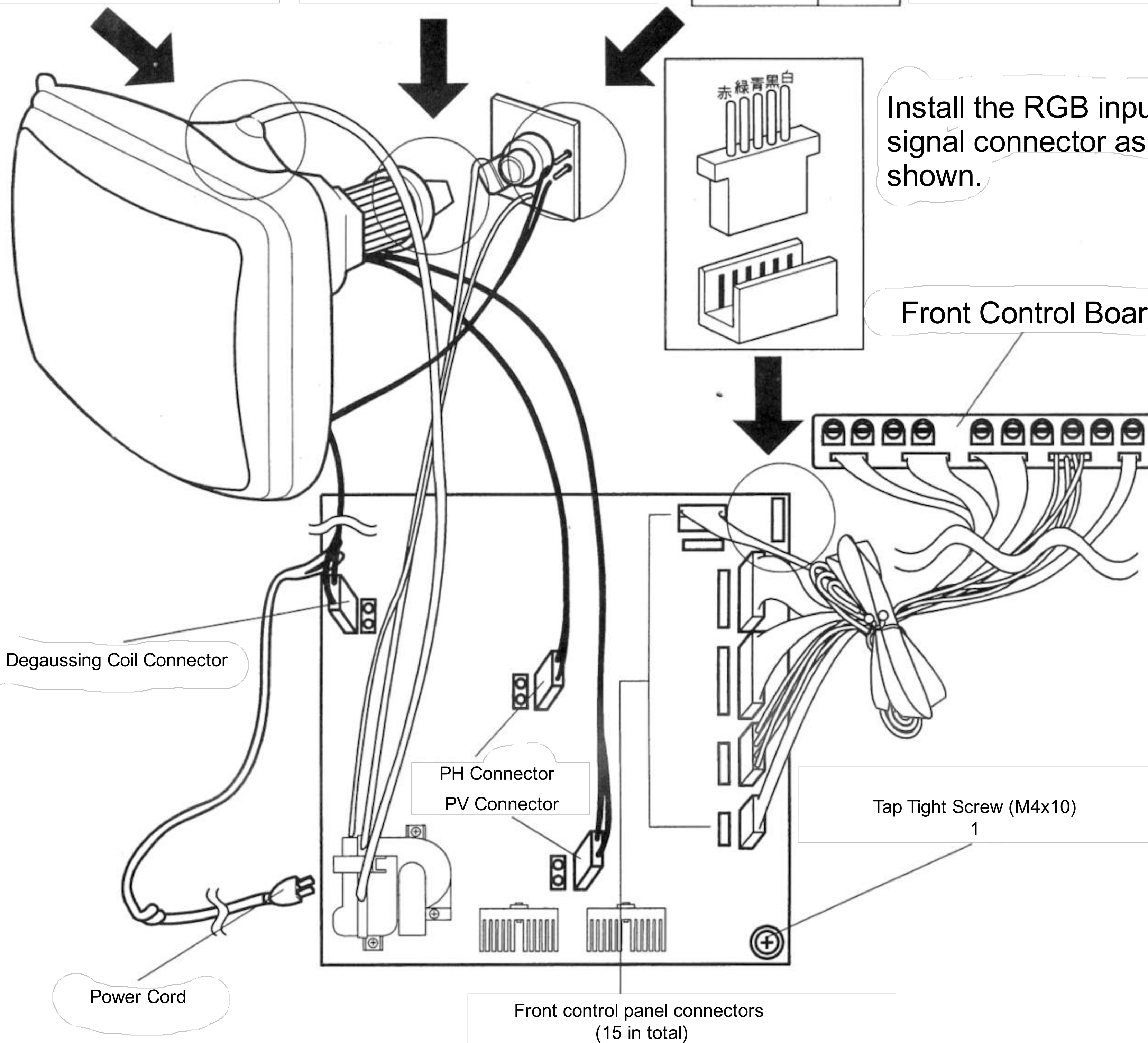
There are very high voltages inside; it is VERY dangerous. Be especially careful when handling the anode cap.

Correct anode cap attachment.
(Hold as shown and plug the connector into the CRT).

Take care not to bend the base pin when installing the socket onto the CRT.



Connect the ground wire from the CRT to the CRT board.



- (1) Remove all connectors according to the picture.
- (2) The main board may be removed by removing the single tap tight screw (M4x10) attaching it.

*At this time, pay close attention to the neck of the CRT.

3 . Front Control Board

- ① H. SIZE (Horizontal Size)
Adjust the horizontal screen dimensions.
- ② H. POSITION (Horizontal Position)
Adjust the horizontal position of the image.
- ③ H. HOLD (Horizontal Sync)
Adjust when image flows left and right.
- ④ V. POSITION (Vertical Position)
Adjusts the vertical position of the image.
- ⑤ V. SIZE (Vertical Size)
Adjusts the vertical screen dimensions.
- ⑥ V. HOLD (Vertical Hold)
Adjust when the image flows up and down.
- ⑦ BRIGHT (Brightness)
Adjust the brightness of the black part of the screen.
- ⑧ R-GAIN (Red Signal Gain)
Turn to the right to darken the red color.
- ⑨ G-GAIN (Green Signal Gain)
Turn to the right to darken the green color.
- ⑩ B-GAIN (Blue Signal Gain)
Turn to the right to darken the blue color.



When adjusting the contrast, set the 3 RGB adjustments to the same setting.

4 . Main Board

- ⑪ Pincushion Adjustment
Adjusts the straightness of the vertical lines around the screen.
- ⑫ 15kHz / 24kHz Switching (FH Connector)
This is used when switching the horizontal frequency.
After switching, adjust H. HOLD.
- ⑬ SCREEN (Screen)
Adjusts the cutoff point of the CRT.
- ⑭ FOCUS (Focus)
Adjusts the focus.
- ⑮ Normal / Wide Switching
Switches the horizontal size of the screen.
(This does not work when FH = 24kHz.)

5 . CRT Board

- ⑩ R-BKG (Red Low Brightness)
Adjusts low brightness of red color.
- ⑪ G-BKG (Green Low Brightness)
Adjusts low brightness of green color.
- ⑫ B-BGK (Blue Low Brightness)
Adjusts low brightness of blue color.
- ⑬ R-DRIVE (Red Light Gain)
Turn to the right to darken the red color.
- ⑭ B-DRIVE (Blue Light Gain)
Turn to the right to darken the blue color.

- ## 6 . Switching between 15.75kHz and 24.8kHz horizontal frequency
- (1) Be sure to turn off the power when switching between 15.75kHz and 24.8kHz horizontal frequency.
 - (2) Switch the "FH Connector" according to the table:

	Setting
Horizontal Freq.	FH Connector (Inside Main Board)
1 5 . 7 5 k Hz	Insert in 15k
2 4 . 8 k Hz	Insert in 24k

If barrel distortion occurs, adjust with (1) R767 (Pincusion Adustment).

- ## 7 . Normal (small) / Wide (large) switching (inside main board)
- (1) Be sure to turn off the power before switching between normal (N) and wide (W).
 - (2) Replace the normal (N) and wide (W) switching connectors with N / W respectively.

Note that this functions only when the horizontal frequency is 15.75kHz.

- ## 8 . Horizontal / Vertical inversion function (biased shoulder yoke polarity switching PH / PV)
- (1) Be sure to turn off power when reversing.
 - (2) Follow the table below for the switching method:

	Normal	Inverted
PH Connector (horizontal)	Insert flyback pin #1 (red) to transformer side.	Insert flyback pin #2 (blue) to transformer side.
PV Connector (vertical)	Insert flyback pin #2 (brown) to transformer side.	Insert flyback pin #1 (yellow) to transformer side.

(1)

Both horizontal and vertical are normal.

(2)

Reversing PH connector mirrors display left-to-right.

(3)

Reversing PV connector mirrors display top-to-bottom.

(4)

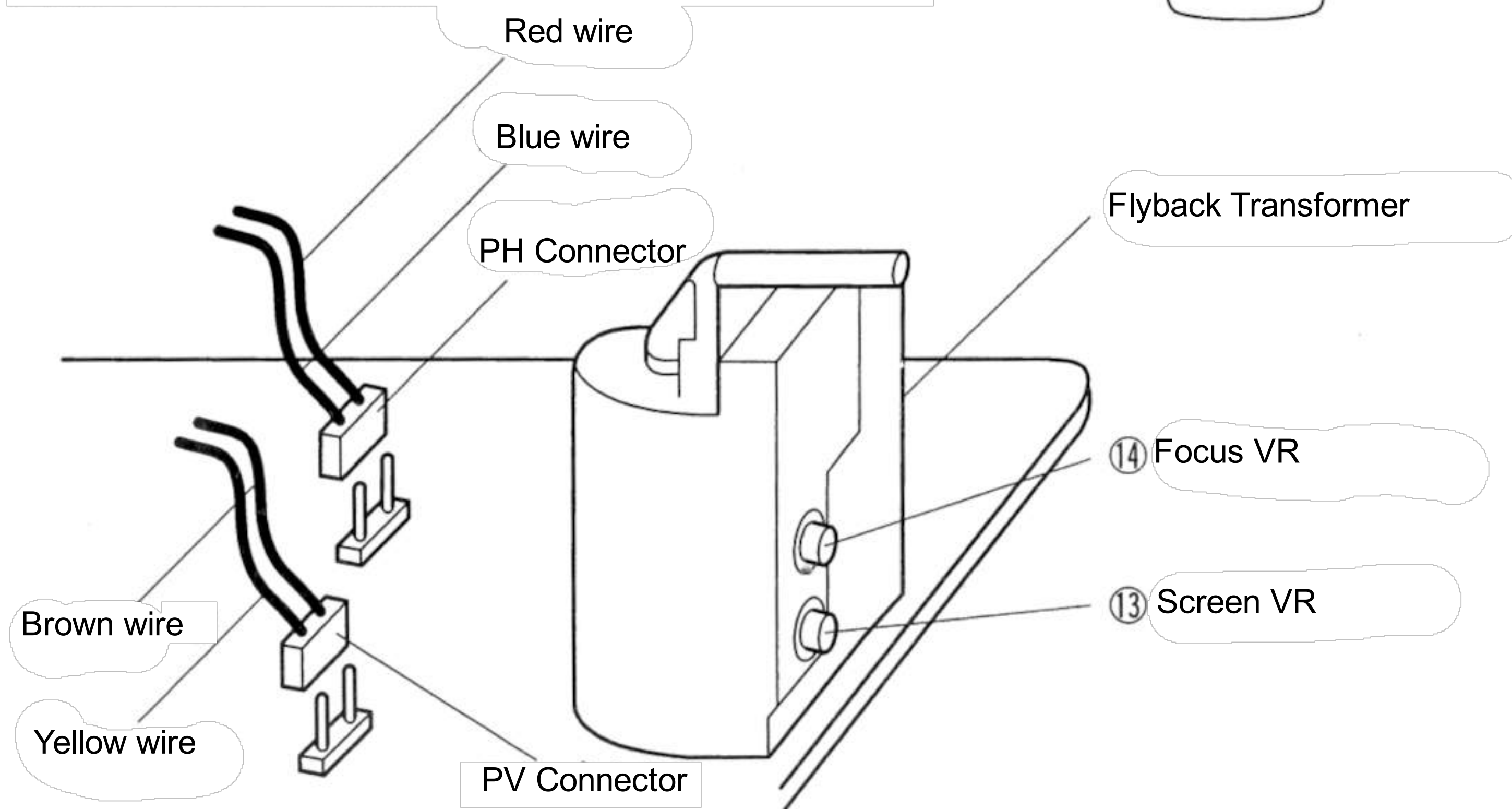
Reversing both connectors inverts the display 180 degrees.

CAPCOM

MO39AC

MOCPAC

CAPCOM



The above figure shows the connections.

7 — 5 White Balance Adjustment

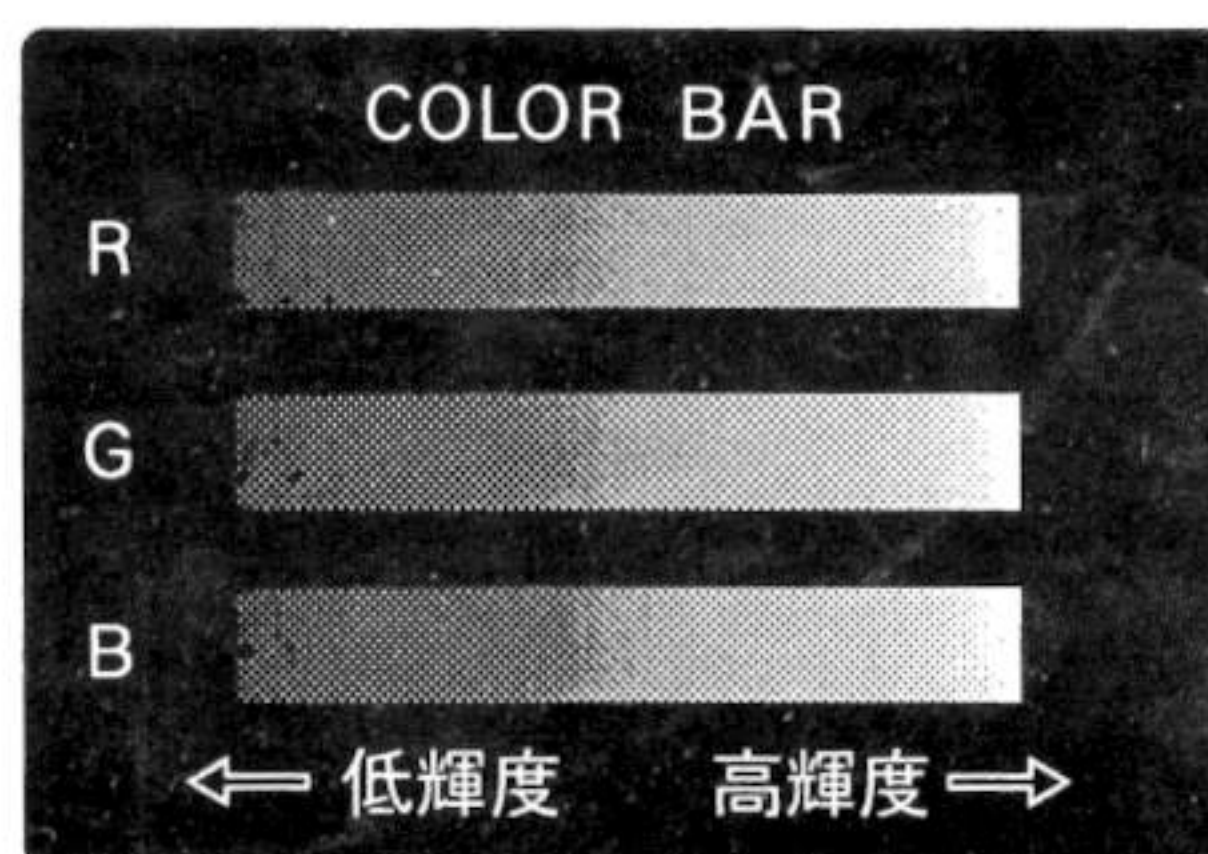
White balance is improved by adjusting the color settings on the front control board.

1. Preparation

To adjust the VRs on the side of the CRT board, remove the power supply as shown in 7-4. Then connect the power supply to the connector. Be careful not to drop the power supply.

2. Display the video signal. (Game board test mode color bars)

3. Adjust the brightness using VR 16, 17, & 18 until each color is at the same level.



4. Make fine adjustments until all color gradients match.

8

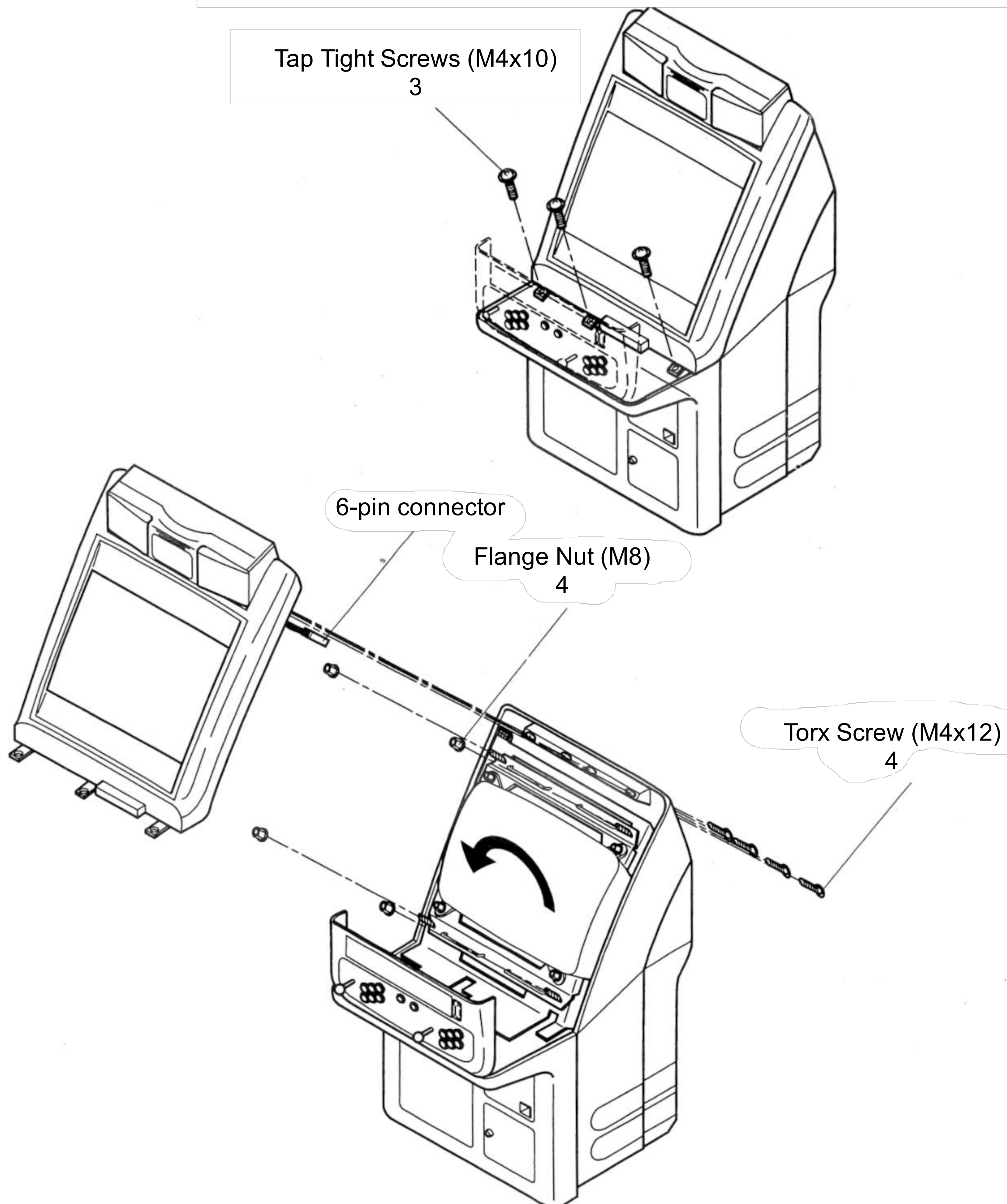
Vertical / Horizontal Monitor Rotation



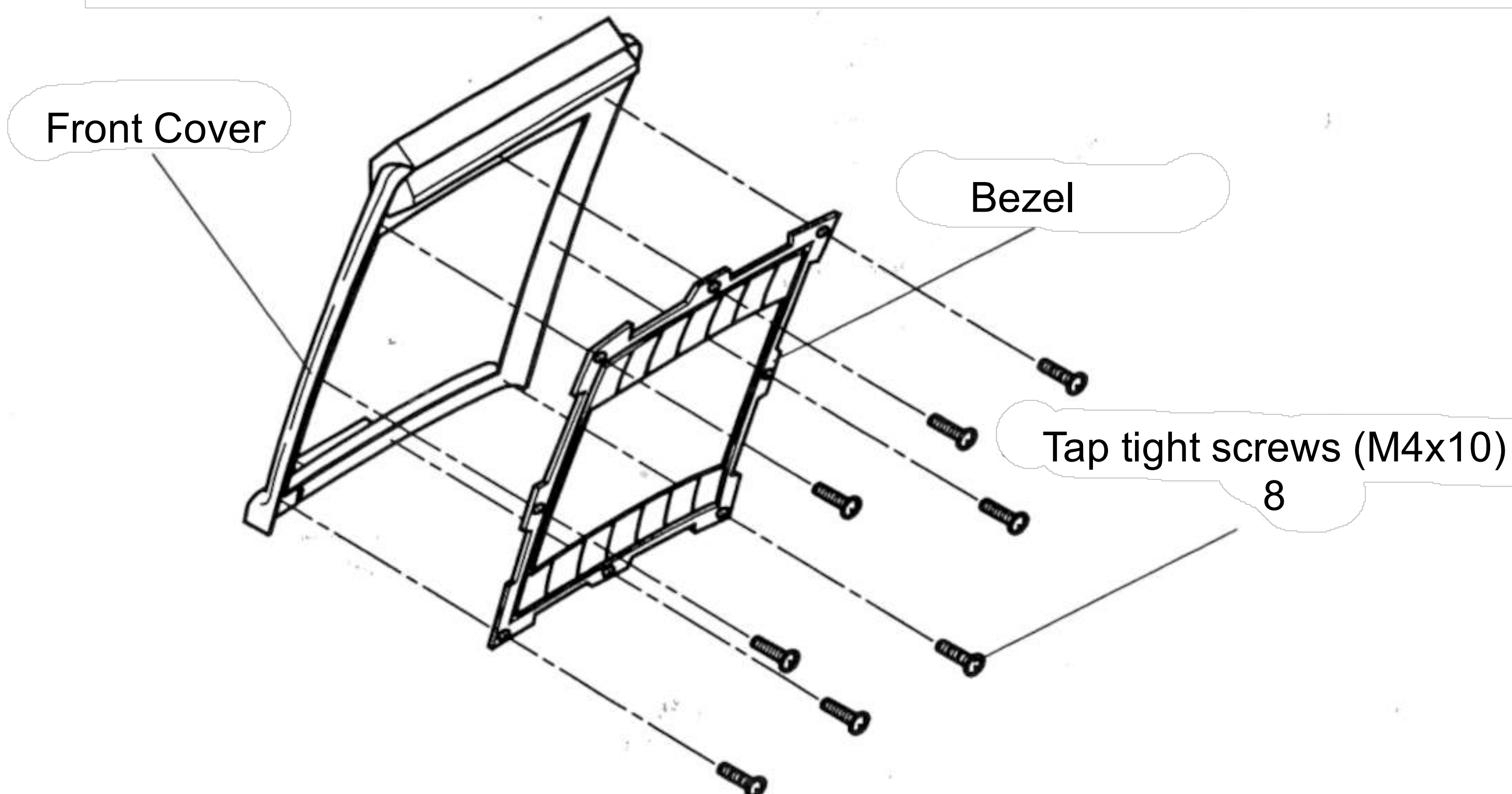
WARNING

Have multiple people to perform this task as monitors are heavy.

1. Open the control panel base (refer to section 5-1).
2. Remove the three tap tight screws (M4x10) and four Torx screws (M4x12) and remove the front cover. At this time, disconnect the 6-pin connector near the upper left of the monitor.



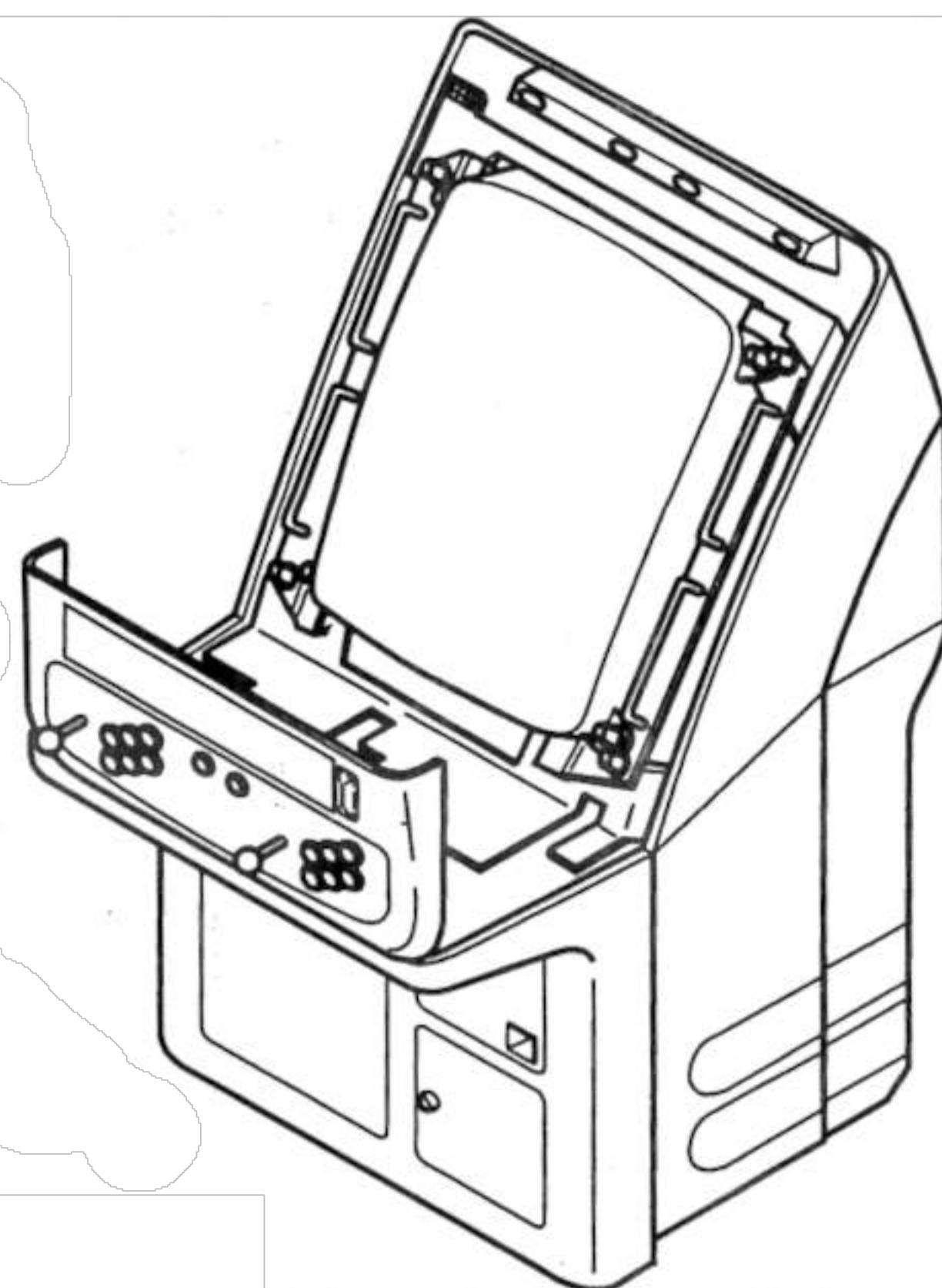
- 3 . Remove the eight tap tight screws (M4x10) that hold the bezel. Then remove the bezel, rotate it 90 degrees and reinstall.



- 4 . Remove the connectors (other than the 5 monitor main board connectors) from the front control board) so the back door can be removed and the monitor pulled out. Also remove the power supply (refer to 7-4) to prevent damage to the CRT board. Additionally remove the power cable and cable clamps.

- 5 . Remove the four flange nuts holding the monitor (M8) and raise the monitor. Be careful not to damage the CRT neck. Rotate the monitor 90 degrees anticlockwise (for horizontal to vertical) or 90 degrees clockwise (for vertical to horizontal) and reattach.

Make sure to hold the handles when lifting the monitor as there is a risk of pinching your hands.



- 6 . Assembly is the reverse of removal.
- 7 . Recheck all connections (do not touch the high voltage part of the internal wiring) and power.

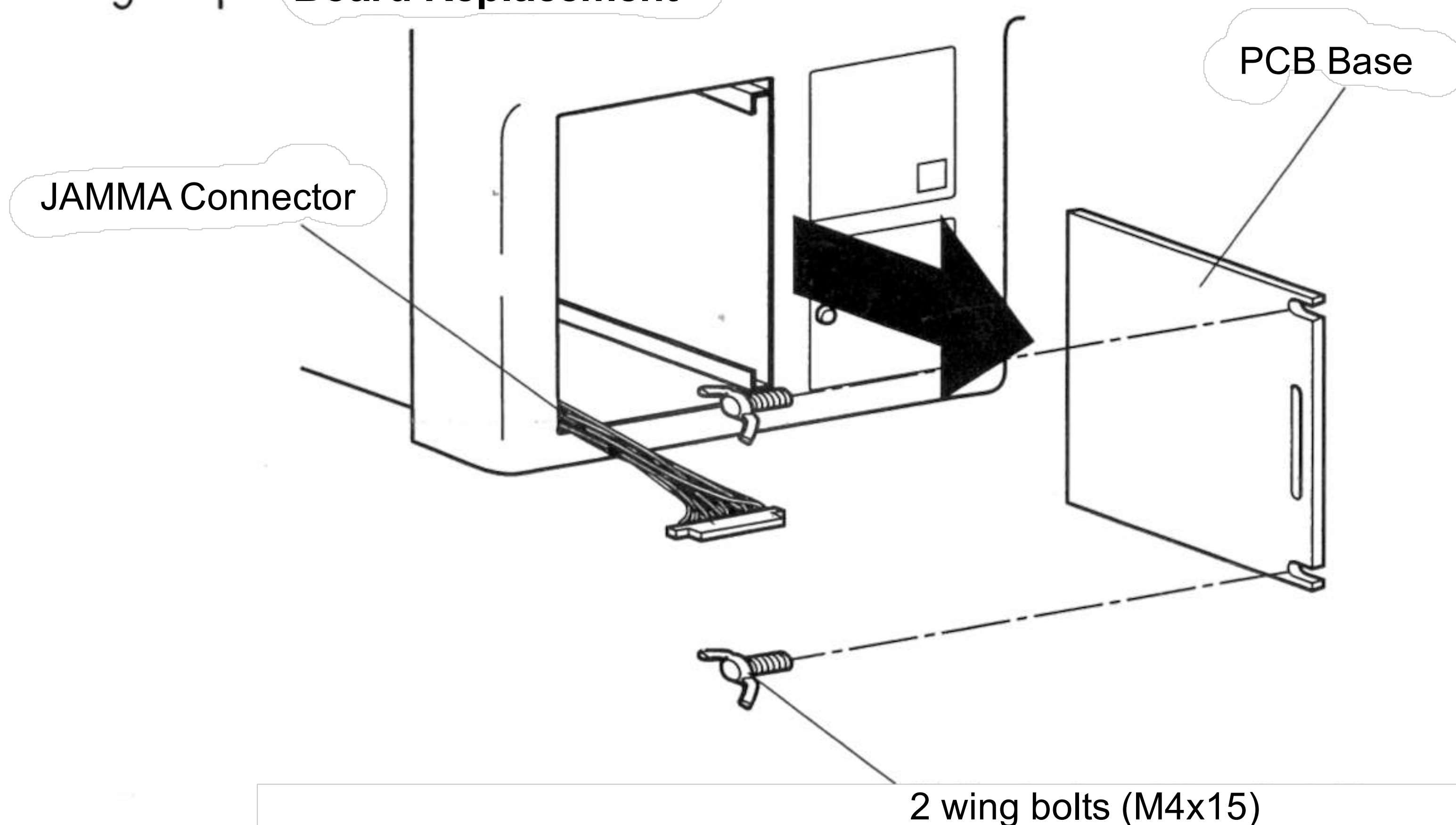


Adjustment of the monitor may be needed after reassembly (refer to the adjustment method in section 7).

9

Maintenance

9 — 1 Board Replacement



1. Remove the main door of the cabinet.
2. Remove the two wing bolts (M4x15) and pull the PCB base toward you to remove.
3. Remove the JAMMA connector from the board.
4. Remove the board from the PCB base.
5. Installation is the reverse of removal.

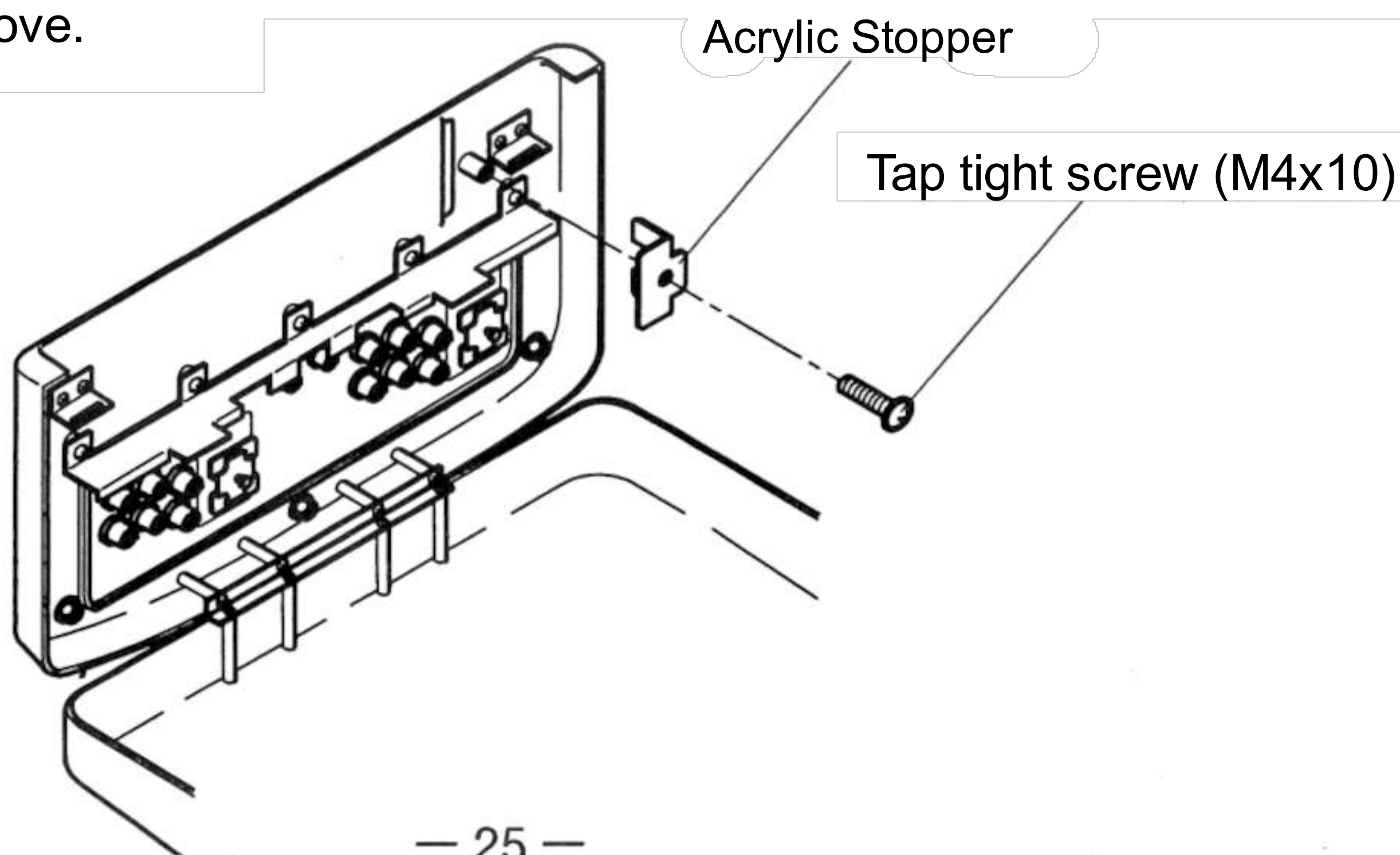


CAUTION

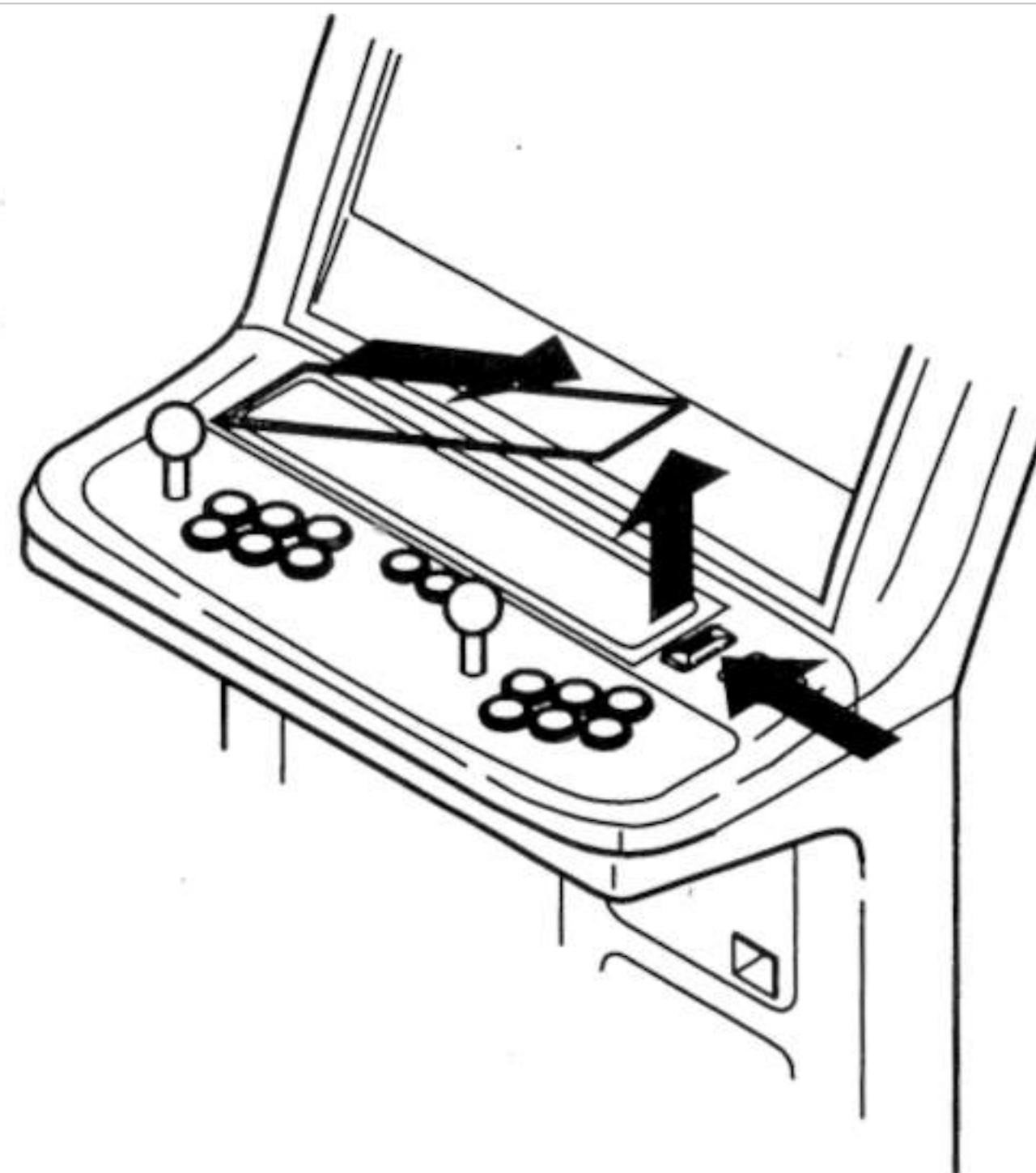
The monitor may require adjustment after replacing the board. Refer to Section 7 for instructions.

9 — 2 Instruction Card Replacement

1. Open the control panel base (Refer to Section 5-1 for instructions).
2. Remove the tap tight screw (M4x10) that holds the acrylic stopper and remove.

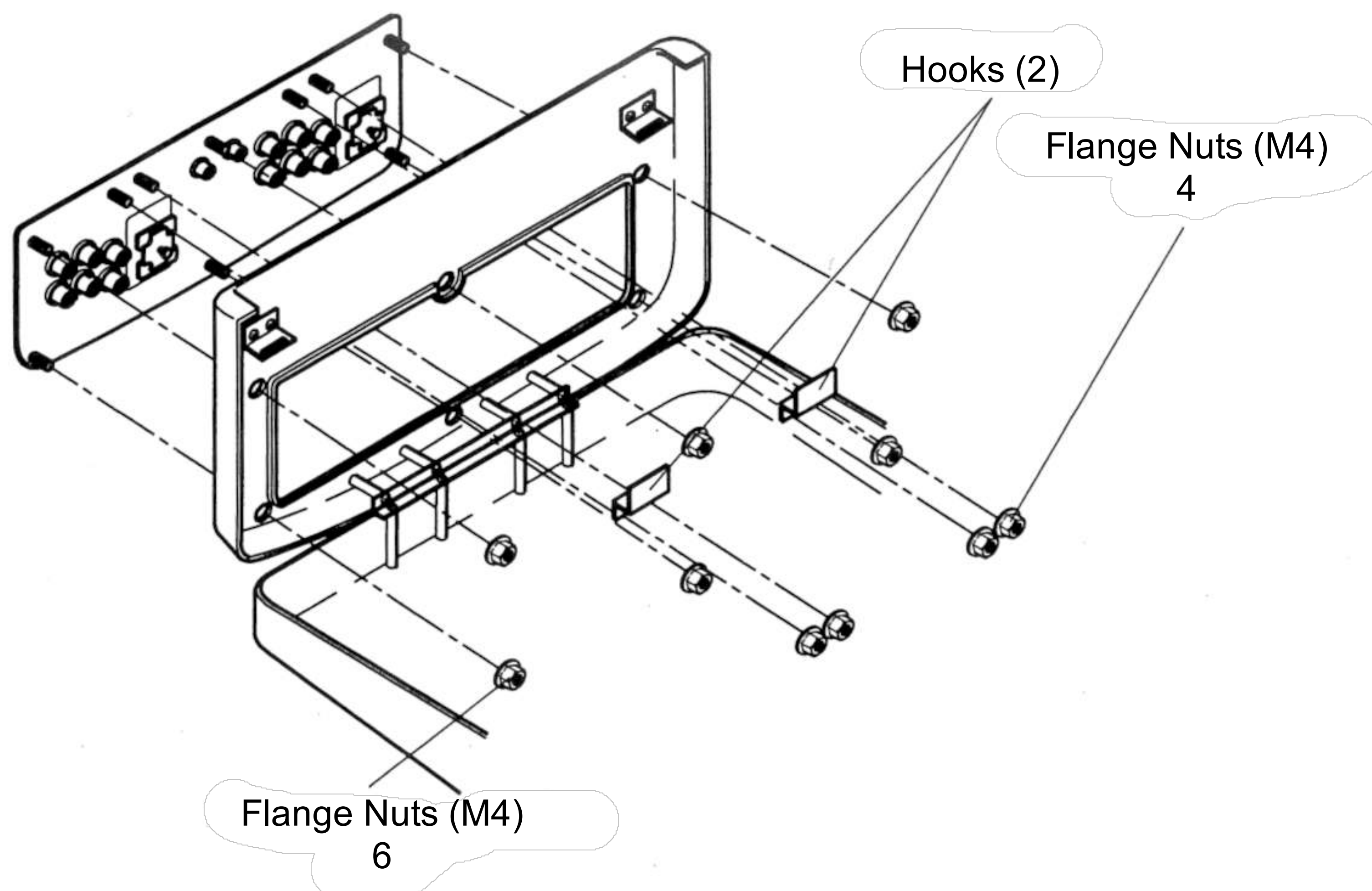


3. Move the acrylic panel to the left until it stops, then lift the edge of the panel and remove.
4. After replacing the instruction card, installation is the reverse of removal.



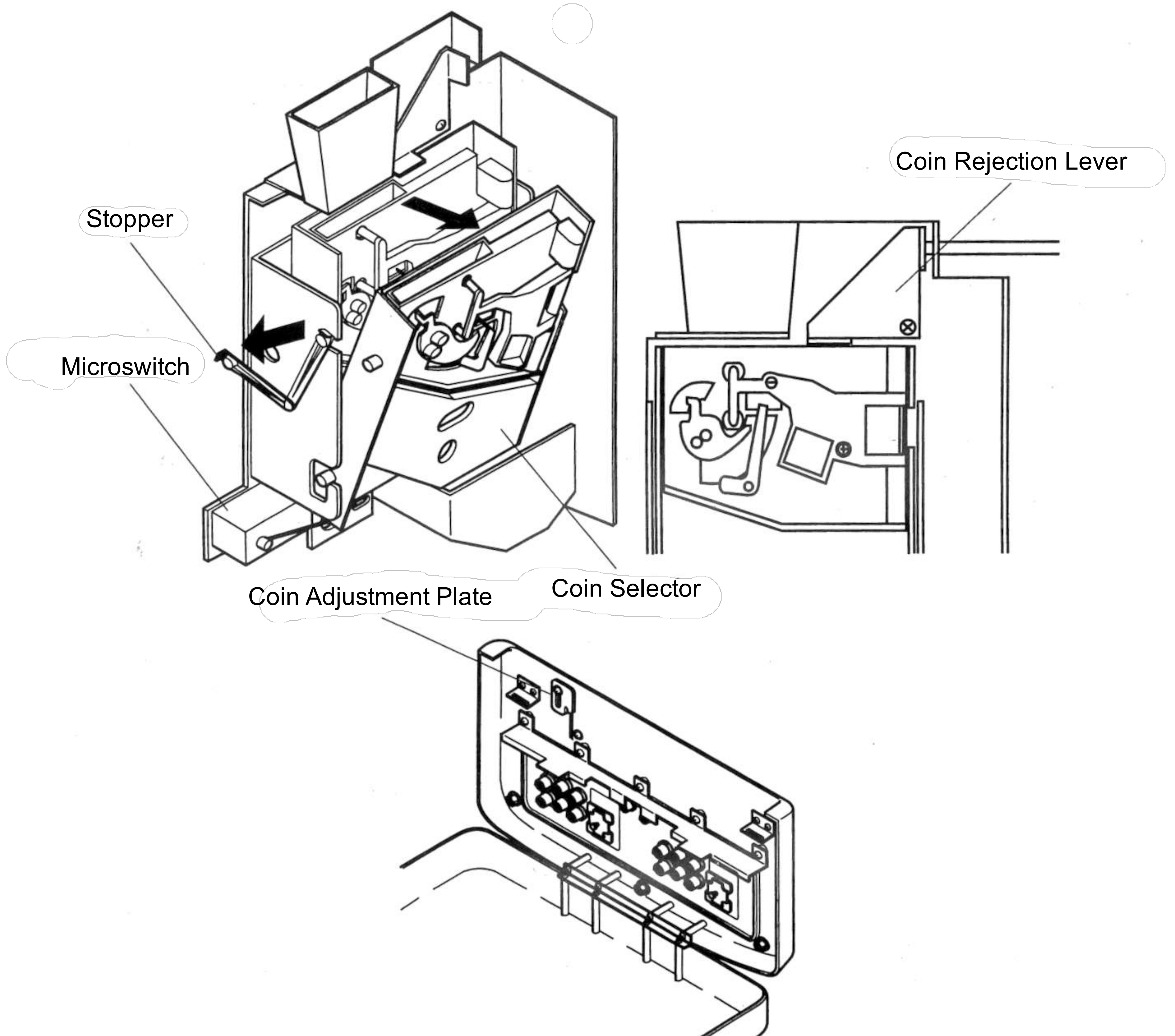
9 — 3 Control Panel replacement and maintenance

1. Open the control panel base (refer to section 5-1 for instructions).
2. Remove the 4 flange nuts holding the two hooks on the back of the control panel in place and remove.
3. Remove the 6 flange nuts (M4) affixing the control panel to the control panel base.
4. Disconnect the wiring harness connectors and the control panel can be replaced.
5. Installation is the reverse of removal.



9 — 4 Coin Selector Removal/Installation

1. Open the coin selector door.
2. Raise the fasteners (2) shown in the figure below.
3. Move the coin selector in the direction of the arrow.
4. Installation is the reverse of removal.
When installing, ensure the coin rejection lever is in the position shown below.



Note: The factory default setting is for ¥100 coin specifications. When using coins other than ¥100 coins, adjust the microswitch to a suitable position for the coin used. Additionally, adjust the position of the Coin Adjustment Plate to accommodate the new coin. Depending on the coin used, further adjustments to the Coin Selector may be necessary.

10

Power Supply ON/OFF

In addition to the main power switch on the back (Refer to Section 3) there is an additional power subswitch inside and above the main door. When you plug in the unit, first turn on the main power switch and then the power subswitch.

11

Troubleshooting

This machine has complex precision electronic circuits.
Ensure the machine is properly grounded.
Exposure to static electricity may damage the machine or shorten its service life.

Issue	Cause	Solution
Does not turn on.	<ul style="list-style-type: none"><input type="radio"/> Power cord not plugged into correct outlet.<input type="radio"/> Power cord not connected to power supply<input type="radio"/> Power switch(es) not turned to ON position.	<ul style="list-style-type: none"><input type="radio"/> Plug power cord into outlet.<input type="radio"/> Connect power cord to power supply.<input type="radio"/> Set both the main power switch and power subswitch to the ON position (Refer to sections 3, 5-1).
Nothing appears on the monitor.	<ul style="list-style-type: none"><input type="radio"/> Connection between top and bottom of unit is not connected (Refer to section 5-1).<input type="radio"/> The game board connector is not connected.	<ul style="list-style-type: none"><input type="radio"/> Connect these connections.
The monitor does not look good.	<ul style="list-style-type: none"><input type="radio"/> The monitor has not been adjusted.<input type="radio"/> Connection between top and bottom of unit is not connected.<input type="radio"/> The game board connector is not connected.	<ul style="list-style-type: none"><input type="radio"/> Adjust the monitor (Refer to Section 7).<input type="radio"/> Connect these connectors.

Issue	Cause	Solution
No sound.	<ul style="list-style-type: none"> <input type="radio"/> Volume is too low. <input type="radio"/> 4-pin audio connector is not connected properly <input type="radio"/> Main unit top/bottom connector is not connected (see Section 5-1). <input type="radio"/> 6-pin front cover connector is not connected (refer to Section 8 - Vertical/-Horizontal Monitor Replacement). 	<ul style="list-style-type: none"> <input type="radio"/> Increase volume. <input type="radio"/> Ensure 4-pin audio connector is connected to the correct output (mono or stereo). <input type="radio"/> Ensure all body wiring connectors are connected properly.
Audio is distorted.	<ul style="list-style-type: none"> <input type="radio"/> Game board audio connection is not using a suitable conenctor. <input type="radio"/> Game board connector is not fully connected/seated. <input type="radio"/> Main unit top/bottom connector is not connected properly. <input type="radio"/> 6-pin front cover connector is not connected properly. 	<ul style="list-style-type: none"> <input type="radio"/> Replace connector with one suitable for game board. <input type="radio"/> Ensure etereo output connector is connected properly (refer to Section 6 - Service Plate Operation). <input type="radio"/> Ensure all connectors are conencted properly.

- If the problems are not resolved after following this troubleshooting process (or if you have any parts inquiries), contact us at the following:

Capcom Service Center Co., Ltd.

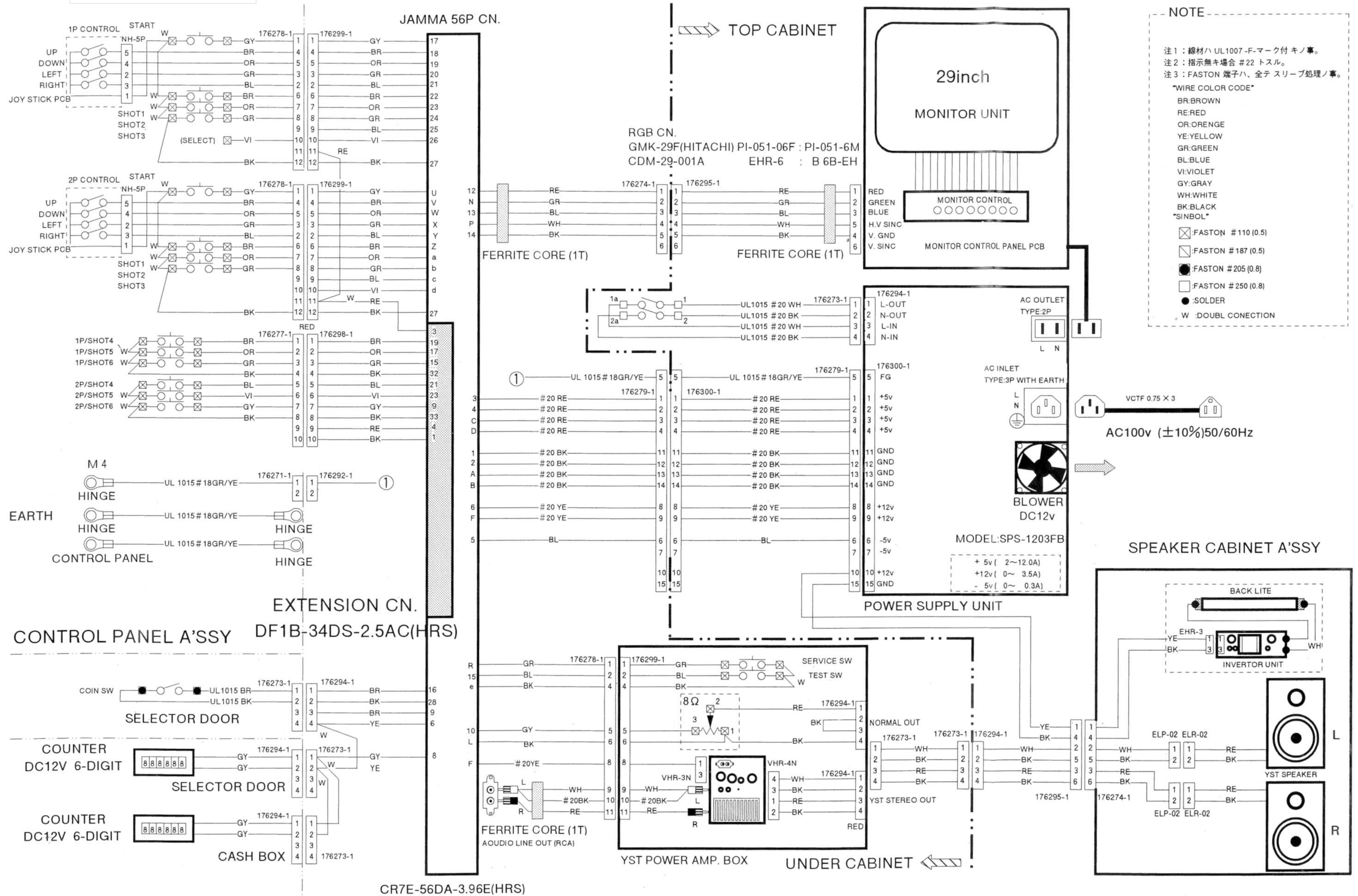
TEL (0595) -20-2033

FAX (0595) -20-2039

Schedule
Hours

Monday-Friday (excluding public holidays)
9:30 AM - Noon; 1:00 PM - 5:30 PM

Wiring Diagram



CAPCOM®

発売元

株式会社

カプコン®

AM国内販売部

(東京支店) 〒163-02 東京都新宿区西新宿 2 丁目 6 番 1 号 (新宿住友ビル43階)

TEL (03) 3340-0730 (代表) FAX (03) 3340-0701

(大阪本社営業) 〒540 大阪府大阪市中央区内平野町 3 丁目 1 番 3 号

TEL (06) 920-3633 (代表) FAX (06) 920-5133

(サービスセンター) 〒518-11 三重県上野市治田 3 9 0 2 号

TEL (0595) 20-2033 FAX (0595) 20-2039

電話番号は、よくお確かめの上おかけ下さい。